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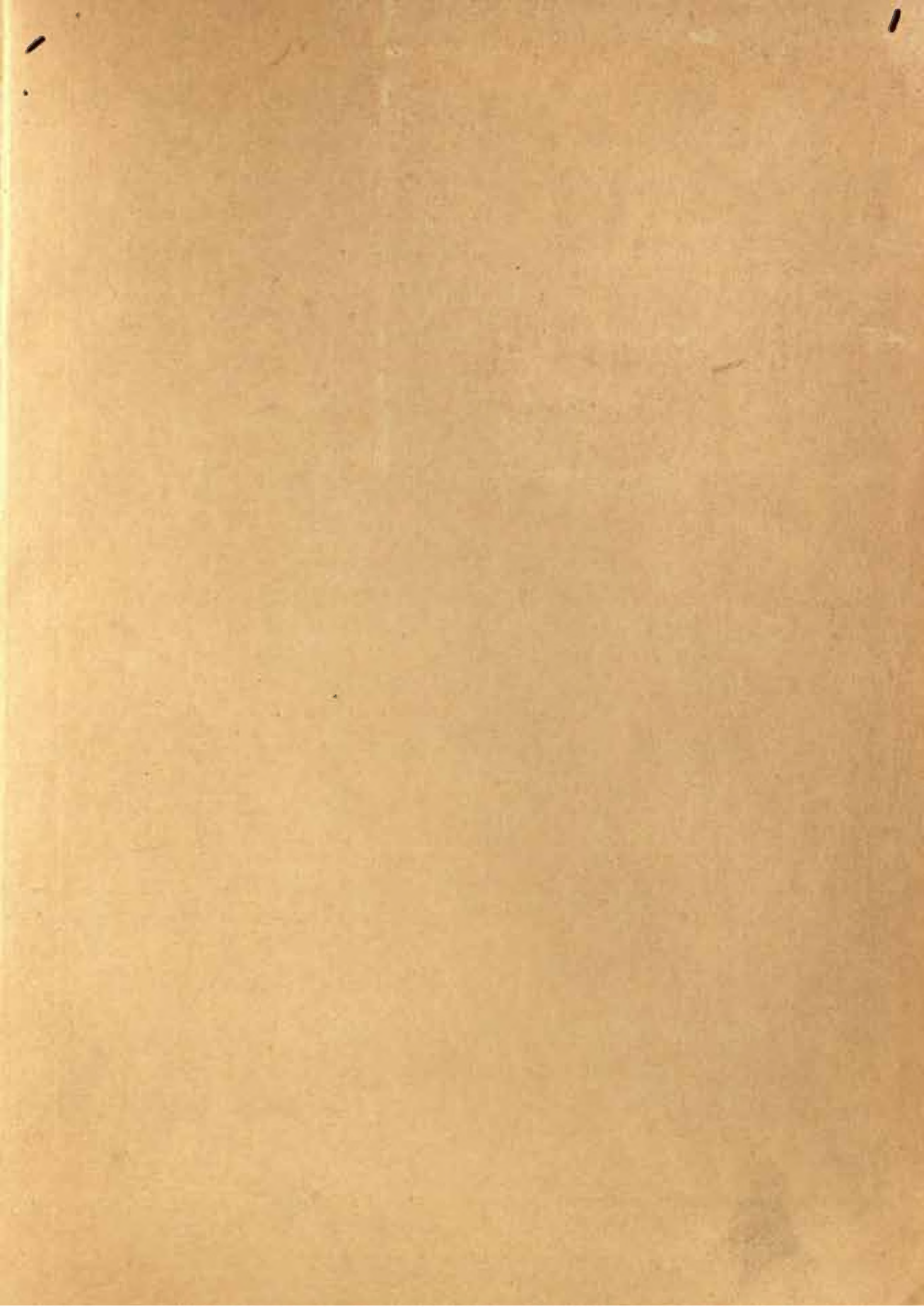
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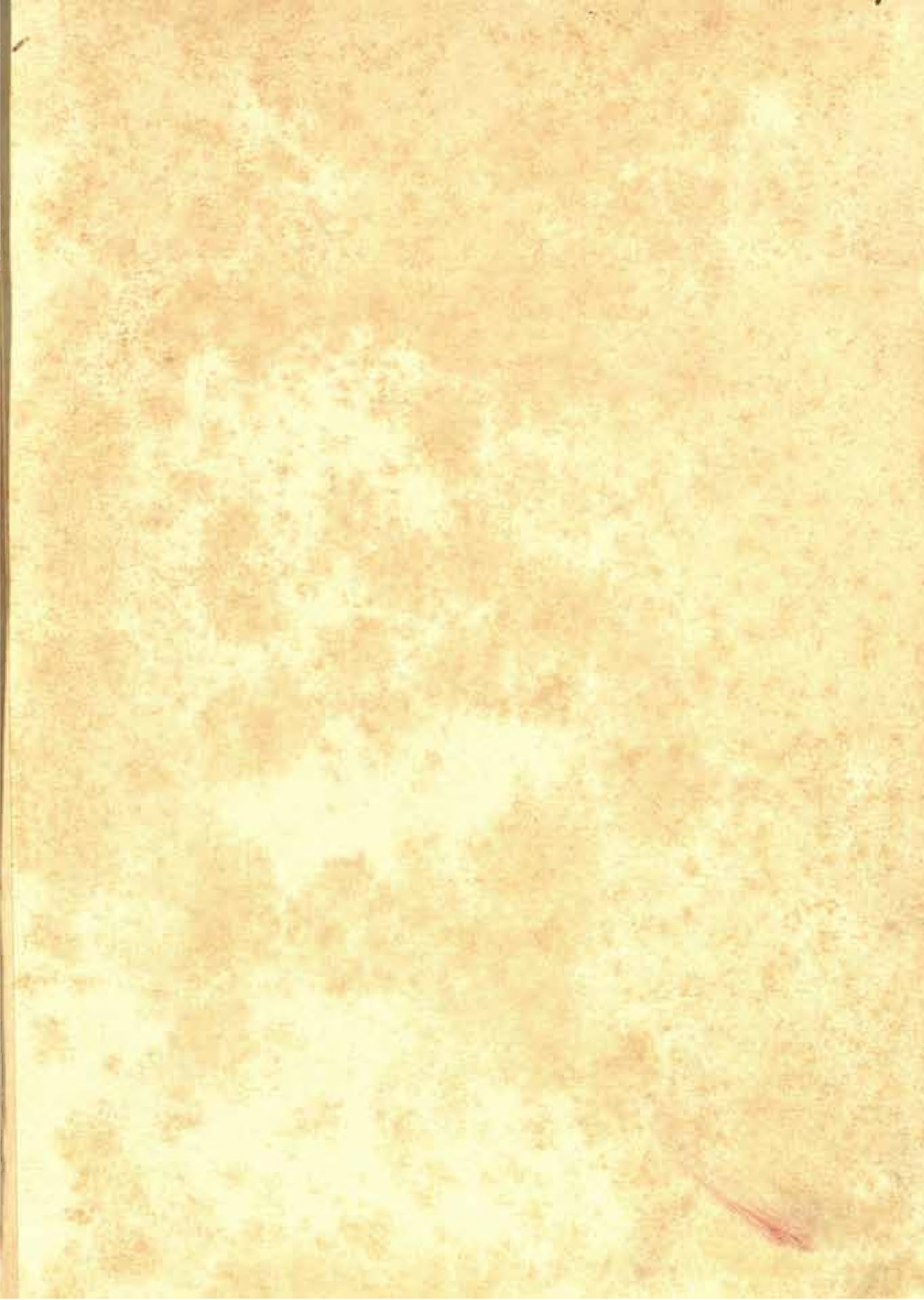
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THE PALACE OF MINOS
AT KNOSSOS

*An Index Volume to the whole work is in course
of preparation by*

Dr. JOAN EVANS, F.S.A.





'ROOM OF THE THRONE' WITH FRESCOS AND COLOURING RESTORED : ON
PAVEMENT, *ALABASTRA* IN COURSE OF FILLING

THE PALACE OF MINOS

A COMPARATIVE ACCOUNT OF THE SUCCESSIVE
STAGES OF THE EARLY CRETAN CIVILIZATION
AS ILLUSTRATED BY THE DISCOVERIES

AT KNOSSOS

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IN THE UNIVERSITY OF OXFORD: HON. FELLOW
OF BRASENOSE COLLEGE



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VOLUME IV: PART II

'CAMP-STOOL' FRESCO—LONG-ROBED PRIESTS AND
BENEFICENT GENII; CHRYSELEPHANTINE BOY-GOD
AND RITUAL HAIR-OFFERING; INTAGLIO TYPES, M.M.
III-L.M. II; LATE HOARDS OF SEALINGS; DEPOSITS OF
INSCRIBED TABLETS AND THE PALACE STORES;
LINEAR SCRIPT B AND ITS MAINLAND EXTENSION;
CLOSING PALATIAL PHASE—'ROOM OF THRONE' AND
FINAL CATASTROPHE

WITH EPILOGUE ON THE DISCOVERY OF 'RING OF
MINOS' AND 'TEMPLE TOMB'

WITH FIGURES 316-966 IN THE TEXT, PLANS, AND
COLOURED AND SUPPLEMENTARY PLATES

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Contents: Vessels for food and drink, mirror and hunting spears set above covering slabs; Gold necklace—Minoan sign of rank; 'Horned' sword; Cruciform sword with agate pommel and gold-plated hilt; On each hilt-plate two engraved scenes of lion hunting wild-goat.

§ 116 A. THE LATEST PALATIAL AGE OF KNOSSOS (L. M. I b—L. M. II).

EARLIER ELEMENTS AND INTERMEDIATE AND FINAL RENOVATION: 'ARGONAUT' FRIEZE AND BULL-SPORT FRESCOS: INTERRUPTED WORK IN EAST BASEMENTS 872

Seismic catastrophe towards close of L. M. I a; Palace restored in L. M. I b style; Older elements inherited from 'Great Rebuilding' of M. M. III b; Survival of High Reliefs; Ceilings with spiral reliefs—XVIIIth Dynasty derivatives; Ceiling fragment with lotus relief from 'Queen's Megaron'—parallel in limestone at Orchomenos; Similar lotus and spiral patterns in the flat succeed these at Knossos and on Mainland sites; Tirynthian and Knossian designs attributed to same hand—typical execution of 'buds'; Flat versions of such designs part of L. M. I b decoration in Palace; Radical reconstitution visible on 'East Stairs'—seismic deposit of L. M. I a pottery beneath them; Other contemporary L. M. I a deposits; Earlier Palace lines largely maintained; Great extension of Processional frescoes in earlier phase of New Palace; Their Egyptian derivation and parallelism with scenes showing tribunaries from Kefiti; 'Shield Fresco'—growing Conventionalism and Military parade, Egyptian and Syrian religious influences—the 'Minoan Genii' and the long-robed votaries of Camp-stool Fresco; Indications of New Dynasty; General unity of latest Palatial culture—illustrated by Deposits; Centralizing and aggressive character of New régime; Signs of destruction on other Cretan sites and on Mainland side; Did 'Minos II' use black mercenaries there?; Great scheme of renovation in Palace—intrusion of 'Throne-room System'; Incipient redecoration in East Quarter—'Argonaut' frieze; Bull-sport frescoes and 'marbled squares'; Unfinished 'amphoras' in 'Sculptor's Workshop'; General signs of sudden catastrophe.

§ 116 B. LAST PALATIAL AGE. 'THE ROOM OF THE THRONE' AND CONNECTED BLOCK: THE CLOSING SCENE 901

Abrupt intrusion of Throne Room system—evidences of early L. M. II date; Traces of bull-sport frescoes in Ante-room opening into 'Room of Throne'; Double doors to it, later removed; Excavation of 'Room of Throne'—Wall-paintings. Gypsum Throne and benches, balustrade and Lustral Basin; Indications of existence of clerestory over basin; Relics precipitated from *loggia* above; Marbled band and Griffin Frescoes; Features of Griffins; Conventional reeds of background as on 'Argonaut frieze'; Hatched shading of Griffin's body—early instance of *Chiaroscuro*; Wingless Griffin—an unique appearance; The Gypsum Throne—traces of coloured designs; 'Gothic' crockets; Counter-arch and evidences of wood-work original; Carbonized remains of wooden Throne in Ante-room; Representations of incurved altar-bases beside Throne; Inner Sanctuary and altar ledge; The 'Throne Room' Suite; Winding staircase to upper rooms; *Loggia* above Room of Throne; 'Lantern' above Lustral Basin restored; Upper Room re-used for Gallery of fresco copies; Service quarters in basement Section—Woman's seat at entrance; Stone drum with sunken quadrants; Probable place of wooden back-stairs; Kitchen with woman's seat, table, and side-board; Precious relics precipitated in and about 'Lustral Basin'—presumably derived from '*Loggia*'; Crystal plaques of gaming boards and caskets—plaque with miniature of charging bull; 'Rhyton' relief with 'Ambushed octopus'; Shell cameo of dagger and belt; Malachite Tridacna shell; All these relics M. M. III b date; Throne of State to be sought in Domestic Quarter; Ritual aspects of Room of Throne—a Consistory Chamber; Ante-room

a scene of initial rites; The purple gypsum font—holy-water sprinklers; 'Lustral Basin' for anointing and clay oil flasks; Flat *alabastra* in course of filling—ladles for extracting oil; Fallen casket with fatence disks; Alphabetiform signs on disks; Sudden interruption of preparatory filling; Symptoms of fresh Earthquake shock; Evidences of conflagration during gale from South-West; No sudden break in the Culture itself; Cumulative effect of seismic menace—Site deserted by Palace Lords; Probable transference of Seat of Government to Mainland side—Knossian influence there in Art, and diffusion of later Palace Script.

§ 117. EPILOGUE: PART I. THE ROYAL SIGNET-RING 947

Discovery of the Royal Signet-ring; Beaded gold hoop resembling that of 'Ring of Nestor'; Parallel arrangement of designs—three successive scenes; 'The Ring of Minos'; Subject, the migration of Goddess to new abode overseas; Sacred Tree feature of both Sanctuaries; Goddess steering vessel across arm of sea; Prow in shape of hippocamp; Parallel scenes of departure overseas; Nude female ministrant of first shrine—remarkable pose and action; Reticulated convention of sea-waves; Goddess reposing on these in Palace Sealing; The Minoan Prototype of Hagia Pelagia.

§ 117. EPILOGUE: PART II. LEGENDARY AND LITERARY TRADITION REGARDING MINOS' RING AND HIS TEMPLE TOMB 957

The Signet-ring of Minos in Greek legend; Theseus recovers ring with Amphitritë's aid; Amphitritë as reflection of marine aspect of Minoan Goddess; Records of Minoan masterpieces in Greek Epic; Tradition of 'Double Tomb' of Minos in Sicily; Epimenides and the Cretan traditions preserved by Diodóros; Minos' Sicilian Expedition; His fate and 'Temple Tomb'; Royal Tomb at Isopata of different type; Hopes borne out by discovery of Temple Tomb at Knossos.

§ 117. EPILOGUE: PART III. DISCOVERY OF TEMPLE TOMB: UPPER SHRINE AND PILLAR CRYPT WITH ROCK-CUT SEPULCHRAL CHAMBER BELOW 962

Clue supplied by finding of Signet-ring; Lateral glen of river gorge South of Knossos; Discovery of Chamber Tombs; Presumed Tomb-robber's *cacde* with choice beads of gold and other materials—dated to L. M. Ia by pottery, &c.; Discovery near by of Temple Tomb; Upper Structures—Column-base and Horns of Consecration; A small Upper Temple; Its entrance from paved roof terrace; Traces of red painted stucco on walls; Full evidence supplied of timber floor supports; The Pillar Crypt below and Double Axes finely cut on blocks; Entrance from Crypt to Sepulchral Chamber cut in rock; A 'Temple Tomb' like that of Minos in Sicily; Its clearance necessitates sinking shaft 23 feet through rock; Rock chamber with central pillar; Massive cypress cross-beams above vault; Interspaces of rock ceiling painted *kyanos* blue; Plain clay vessels within, M. M. III^d, but valuables (including ring) removed; Sepulchral chamber itself a ritual Pillar Crypt; Cupped offertory block of igneous stone—of prehistoric Egyptian type; Derivatives or similar blocks in Early Minoan Ossuaries, accompanied by other objects of early Nilotic tradition; Other prehistoric Egyptian stone vessels from Knossos; Religious connexion with Delta; Knossos solitary Cretan find-spot of early imported Egyptian stone vessels, prehistoric and proto-dynastic; Middle and New Empire connexions with Crete recalled; Increased Egyptianization under Late Dynasty.

§ 117. EPILOGUE: PART IV 988

Traces of Catastrophe to Monument at end of L. M. Ia—evidence of Earthquake victims within Pillar Crypt—wholesale burial of remains there; Associated pottery

L. M. Ia; Much rough rebuilding of structure at this epoch; Basement entrance hall and stairs to roof terrace—primitive key; Small Court with massive paving and verandah; Possibility of egress for Guardian from inner Staircase; Exterior connexions of Monument with 'High Priest's House' and, by the Great South Road, to Town and Palace; Entrance at N.E. corner and 'bridge' passage to roof of Pavilion; Paved Court in front of Pavilion suitable for ceremonial rites and sports—roof terrace vantage ground for spectators; Flower vases placed on roof terrace; Glimpses of formal Minoan flower garden from Harbour Town of Amnisos; Rock chamber re-used for burial; Pit with sepulchral relics; Ivory comb; Cylindrical alabaster vase; Large globular vessel of 'Palace Style' (L. M. II) with 'three C's' pattern; Group of miniature vases—child's toys; Human remains beside pit and entrance; Old man's skull of mixed Armenoid and 'Mediterranean' type and child's bones (explaining the toy vases); Skeletons originally on floor or in coffins; Pit for relics paralleled in 'Tomb of Tripod Hearth'; Incense burner or fumigator—ceremonial type with painted decoration; Its brilliant foliage typically L. M. II; Striated sprays as Tell-el-Amarna vase-painting, but of Knossian tradition, derived from palm-leaves; Traces of Snake Cult—small 'milk-jugs' on roof terrace identical with those of 'Snake Room'; Evidences of later memorial cult; Offertory vases, L. M. II—L. M. III a—no later sherds; Abrupt termination of memorial cult.

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§ 100. THE 'CAMP-STOOL' FRESCO OF THE NORTH-WEST SANCTUARY HALL AND THE EVIDENCES OF A SACRAMENTAL CLASS OF PEDESTAL GOBLETS.

North-West Sanctuary Hall; 'Camp-Stool' Fresco connected with it; Fragmentary condition of remains; Evidence of double bands; Alternating colours of fields; Elements of restoration; Seated figures on folding-chairs, others standing; 'La Parisienne'; 'Sacral Knots' and wing-like excrescences; Short-sleeved Jackets of both sexes; long robes; 'Young Minotaur' on similar 'Camp Stool'; Goddess similarly seated; Evidence of gloves; Confronted sitting figures—passing of 'Loving Cups'; Sacramental character; Juice of Sacred Tree a source of Possession; Silver goblet; Gold chalice as restored—comparison of Mycenae chalice with Doves and 'Nestor's Cup'; Similar 'alabastron'-like chalice held by Goddess on Tiryns ring; Parallel form of basin filled by Minoan Genii; Restoration of part of painted stucco design of seated Goddess, in this case, too, probably receiving libations; Offertory scenes on signet types compared; Clues to chronological place of 'Camp-Stool' Frescoes—probably L. M. I b.

So far as the 'Palace Style' pottery is concerned, its most abundant source was the areas where it originally came to light in the South-West angle, and the North-West border of the Palace itself. In the last case we have every reason for connecting it with the Sanctuary Hall of which we have other evidence, while the quantity of remains of painted clay goblets of a specially ritual type found outside the collapsed South-West corner of the building points to the existence there of another offertory shrine, apparently of more popular resort.

The Sanctuary Hall to the North-West seems to have borne a more select character, and was certainly more richly equipped. To this area belong the finely carved relief bands adorned with 'triglyphs' and rosettes described in the Second Volume of this work.¹ Beyond the great 'amphoras' and jars found in relation to it—including the most magnificent group of these palatial vases anywhere discovered—painted clay vessels were only very exceptionally forthcoming, while on the other hand, as will be shown below, the fresco remains here precipitated have preserved a record of sacramental scenes, in which vessels in precious metals were in

Sanctuary Hall to North-West: more select in character.

¹ *P. of M.*, ii, Pt. II, p. 590 seqq. and Figs. 368, 370. Compare, too, above, § 97, p. 221 seqq.

WEST COURT

SUNKEN
REMAINS
OF RELIEF
BAND & c.

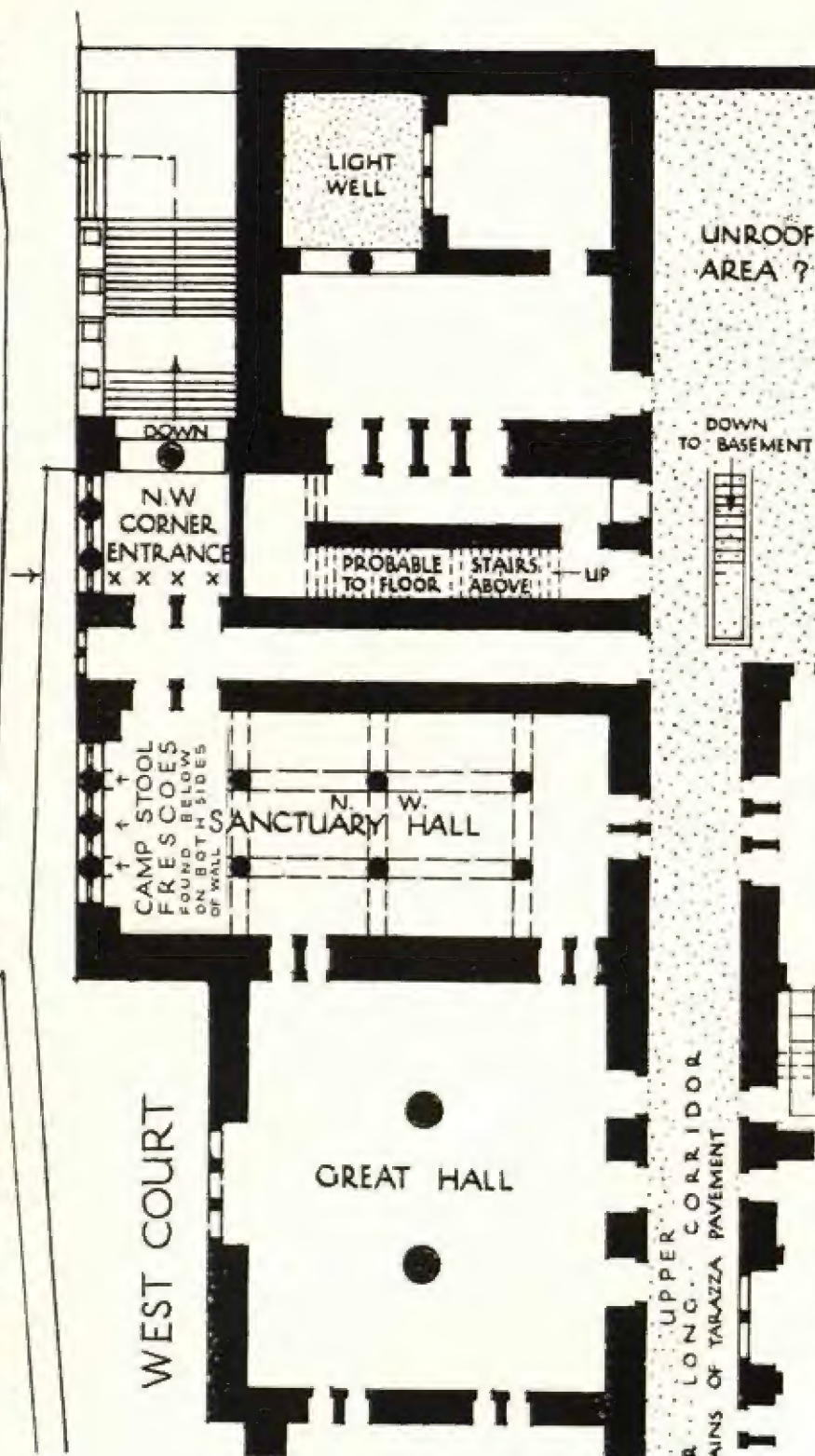


FIG. 316. UPPER PLAN OF PART OF NORTH-WEST PALACE AREA; CONJECTURALLY RESTORED, SHOWING 'SANCTUARY HALL,' WITH WHICH THE 'CAMP-STOOL FRESCOS' WERE CONNECTED.

use. These painted stucco remains, to which, from their most characteristic features, the name of the 'Camp-Stool Fresco' has been given, are the principal theme of the present Section.

From the conjectural plan of this Sanctuary Hall, here reproduced in Fig. 316,¹ it will be seen that it stood in intimate connexion with an entrance system, including an ascending flight of steps, near the North-West angle of the building.

This Sanctuary lay over the 11th, 12th, and 13th Magazines, and its South-West angle projected in front of the façade of the 'Great Hall', more or less square in shape, about the structural arrangements of which, including its two columns with their supporting piers below, we have sufficient information.

In order to protect the contents of some of the more important Magazines, sections of the floors of both this and of the adjoining part of the 'North-West Sanctuary Hall' have been restored, as shown in the photographic Figure 317. Column-bases belonging to its central lines are conjecturally shown. The piers of those of the 'Great Hall' are preserved. (Cf. Revised Plan C in pocket at end of Part I of this Volume.)

North-West Sanctuary Hall: associated with 'Camp-Stool Fresco.'

The 'Camp-Stool Fresco'.

The fresco remains occurred above the top of the West wall of the underlying basement Magazines and on either side of it, about a metre above the ground level. As to their original position in the Sanctuary itself there was however no clue. They were in a very fragmentary condition, and it was only after long study that it has been possible to carry out a restoration of at least one scene and to offer some suggestions as to the further completion and grouping of other figures.² (See Coloured Plate XXXI.)

Remains of 'Camp-Stool Fresco'.

As a working hypothesis we may assume that there were originally two broad bands, divided from one another by a border consisting of black, red, and white horizontal stripes. The upper of these bands consisted of at least two rows of subjects, since part of a man's foot and of the sloping leg of a camp-stool on a blue ground is seen immediately above the border of the yellow field of the underlying zone here restored. This upper band, of which we have only a small fragment, was, we may suppose, framed above by a black, red, and white border like that below it.

¹ *P. of M.* ii, Pt. II, p. 593, Fig. 369. See, too, Revised Plan C in pocket at end of Part I of this Volume.

² The fragments were originally drawn for me by Monsieur E. Gilliéron, père, in view of a

Knossian Atlas, as then projected. They have since been redrawn by his son in accordance with the present scheme of partial restoration. The lower part of it was at first misunderstood (see *Report, Knossos*, 1901, p. 56).

The other fresco band, of which parts are here restored, shows a similar border above, here taken to form part of that of the upper zone. For symmetry's sake, moreover, we are entitled to suppose that another

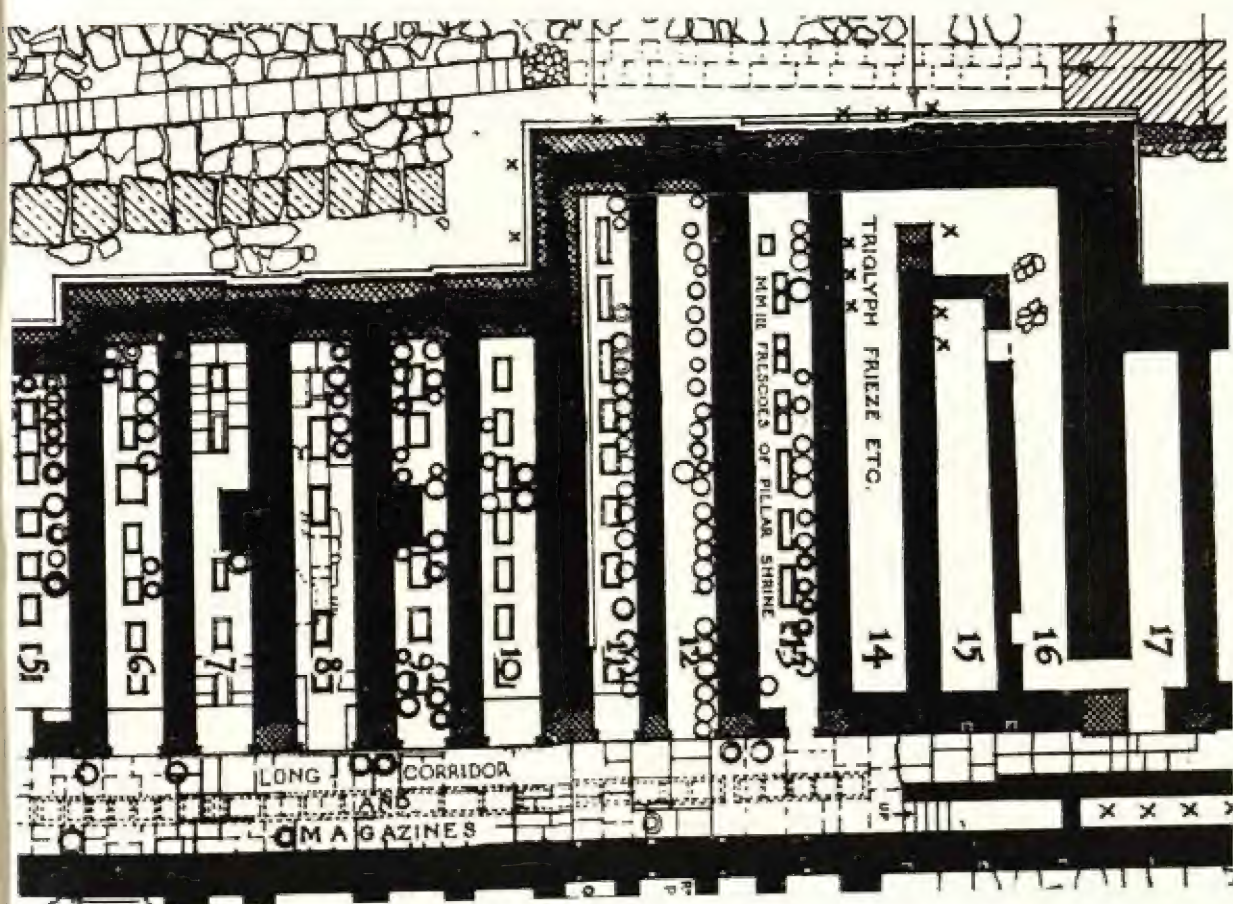


FIG. 317 *bis*. SECTION OF WEST MAGAZINES INCLUDING PART ROOFED OVER.

band of equal width had been executed beneath this, set below on a similar triple border. There would have been thus two double bands.

Judging from the evidence supplied by the second band (32 cm. in width), the height of each double row of subjects was 64 centimetres. Doubling this and adding 18 more for the total breadth of the three borders,¹ the height of the painted frieze would thus have been 146 centimetres,² or nearly a metre and a half. It is to be observed that the borders with a succession of plain stripes—though in this case they are less numerous—fit on to those

¹ The borders were exactly 6 cm. in breadth.

² Or 4 ft. 9½ inches.

of that earlier class of wall paintings, of which such a rich series of fragments occurred in the 'House of the Frescoes'.¹

Alterna-
tion of
Coloured
Fields.

To add variety to the effect, the successive pictorial bands of the frieze were divided vertically into fields of different colours, a practice of which we have other examples from Minoan wall-paintings. This is clearly shown in the case of the blue ground behind the seated lady (Pl. XXXI, E), where part of the border of the adjoining orange field is visible on the same stucco fragment. The seated boy, D, has been conjecturally placed immediately behind the female figure, its orange background being assumed to belong to that seen on the border of E. According to the analogy supplied by B and C, we may infer that both of these subjects belonged to facing couples.



FIG. 318. FRAGMENT SHOWING PART OF TWO FRESCO ZONES, THE BACKGROUND OF THE UPPER, ORANGE, OF THE LOWER, BLUE. ($\frac{1}{2}$)

The alternation of colouring was also carried out in relation to upper and lower zones. Thus we see the small fragment, A, with its blue ground placed above the orange field of the subject in the row below. Another small fragment (Fig. 318), not illustrated in the Plate, shows two feet of an apparently standing male figure on an orange ground, while immediately below this is the upper part of a male head with a blue background.

Mostly
seated
male
figures.

The painted stucco fragments belong to at least twelve persons,² nine of them apparently seated. From the traces in three cases of folding-chairs, with legs that must certainly have been of metal-work, the general name of 'Camp-Stool Frescoes' has been given to this group. The upper surfaces of these stools, which probably consisted of leather, was covered with what may be recognized as woollen fleeces, not improbably of sacrificial animals.

¹ See especially *P. of M.*, ii, Pt. II: Suppl. Pl. XX.

² Besides the fragments shown on the Coloured Plate XXXI there were two small pieces. One shows the feet turned left of a

seated youth, wearing a long robe with a blue border, and part of a white and a red band of the outer border below. The other is given in Fig. 318.



In one case only, to be referred to below—the fragment Pl. XXXI, H—the upper part of the seat is of a different character.

From the long robes worn by most of the figures and their flowing



FIG. 319. *LA PARISIENNE.*

319, has had a certain success in the modern world, and is often referred to as 'la Parisienne'.¹ Her elaborate coiffure and suspiciously scarlet lips are certainly marks of a highly artificial social life, such as we already have glimpses of in the Miniature Fresco of considerably earlier date depicting conversational groups of ladies in the front rows of the Grand Stand.² But the figure before us, though not wanting in a certain picturesqueness, lacks the vivacity and individual characterization of the older group.

She is wearing a kind of scarf bunched up behind and tied in what from other analogies must be regarded as a 'Sacral Knot'. Her high-bodied dress shows a kind of broad sleeve, adorned with three fringed loops. It looks, indeed, as if the material were of a diaphanous texture, and that the light ground against which the blue and red frills are displayed should be taken for the white flesh colour showing through.

The wing-like excrescences that spring from the back of the seated boy,

hair, it might at first sight be supposed that they were of the female sex, but the red skin colour is quite decisive in the matter, and they must be regarded as youths or boys. The smaller figure is clearly a young boy.

The important fragment, E, however, from its white flesh colour, is evidently a girl.

The heads of the figures with their staring eyes, the highly conventional hand of C, as well as the stiffly arranged pose and drapery, evidence a very crude style.

The seated lady, E, indeed, here repeated in Fig.

Seated girl, known as *La Parisienne*.

¹ See Dussaud, *Les Civilisations préhelléniques*, p. 78, 'Fresque de Cnosse, dite de la Parisienne'.

² See *P. of M.*, iii, 46 seqq., Coloured Pls. XVI, XVII.

Men in
short-
sleeved
jackets.

of the companion group, differ from the 'Sacral Knots' of the female figure. With the exception of these two features, however, there is a close agreement in the dress of the figures of both sexes. They are draped in long robes of an unwonted kind, reaching to the ankles. This dress terminates above in short sleeves, recalling those of the usual female jackets, as seen on the figurines of the Goddess in the Temple Repositories and elsewhere. Similar short sleeves, indeed, appear on the forepart of a male personage seen on a painted

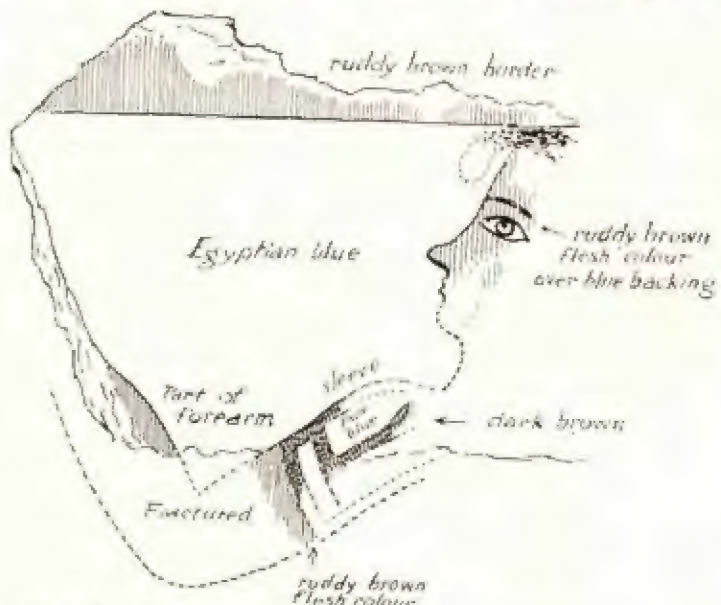


FIG. 320. PART OF MALE PERSONAGE CLAD IN SHORT-SLEEVED JACKET; KNOSSOS.

stucco fragment in the South of the Palace (Fig. 320), and this element in costume was known, therefore, to Minoan Crete as well as to the Mainland regions, where it becomes general in Mycenaean Art.

Simple bands here take the place of the usual close-fitting belts, and the long skirts are composed rather of broad diagonal bands than of flounces. Such a garb may well have been worn over the normal belt and loin-clothing of the men's costume.

Long
robes of
both
sexes.

Taken as a whole, the costume has certainly a feminine appearance, and the assimilation of the dress in both sexes may be taken to have a ritual significance. A parallel example has already been supplied in the case of the bull-sports of the Palace arena, where the girl performers attired themselves in the most characteristic articles of the men's clothing, including the Minoan equivalent of the 'Libyan sheath'. So, too, the Goddess herself, as 'Lady of the Sports', is depicted in her chryselephantine image with her loins clad in the same male fashion as that adopted by the girl performers.

Of the significance of these long robes as an evidence of the intrusion at this time of Syrian influences more will be said below.

In three cases (A, C, and D) we have direct evidence that the figures were seated on folding-chairs or camp-stools, and we may infer that others, like the female votary with the 'Sacral Knot', were seated in a similar manner, though an exception to this, described below, is illustrated by the fragment II. From the use of this kind of seat—as already noted—the general name of 'Camp-stool Frescoes' has been given to this series.

Use of
Camp-
stools

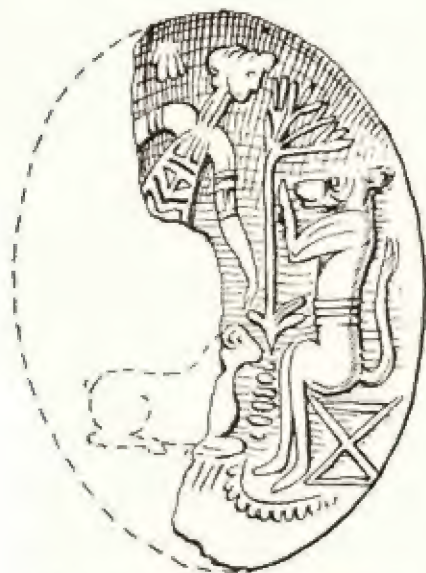


FIG. 321. THE YOUNG MINOTAUR ON CLAY SEAL-IMPRESSION. (1)

The use of such folding-seats in a religious connexion recalls the remarkable seal-impression depicting the strange calf-like monster, referred to above, as the 'Young Minotaur' and here reproduced (Fig. 321), who is seated on a similar folding-seat. On a clay sealing from the Little Palace (Fig. 322) a richly attired female figure, in whom we may again recognize the Minoan Goddess, seated on a stool of the same form, bends forward and reaches out her hand to take what seems to be a food-offering from a bowl held out to her by a male ministrant. So, too, on the great Tiryns ring described below, the Goddess is seated on a folding-stool, though in that case a curved back has been fitted to it.



FIG. 322. FOOD OFFERING HELD OUT BY MALE MINISTRANT TO GODDESS ON FOLDING-SEAT. CLAY SEAL-IMPRESSION FROM LITTLE PALACE. (2)

of which had been evidently tucked into the girdle, as restored in the drawing.

The group of two seated youths face to face, with the knees almost touching, formed by B and C (see, too, Fig. 323), preserve the best record

IV**

D d

Gloves.

of what seems to have been a recurring feature in this series of designs. The confrontation of the two figures and the certainty of the conclusion

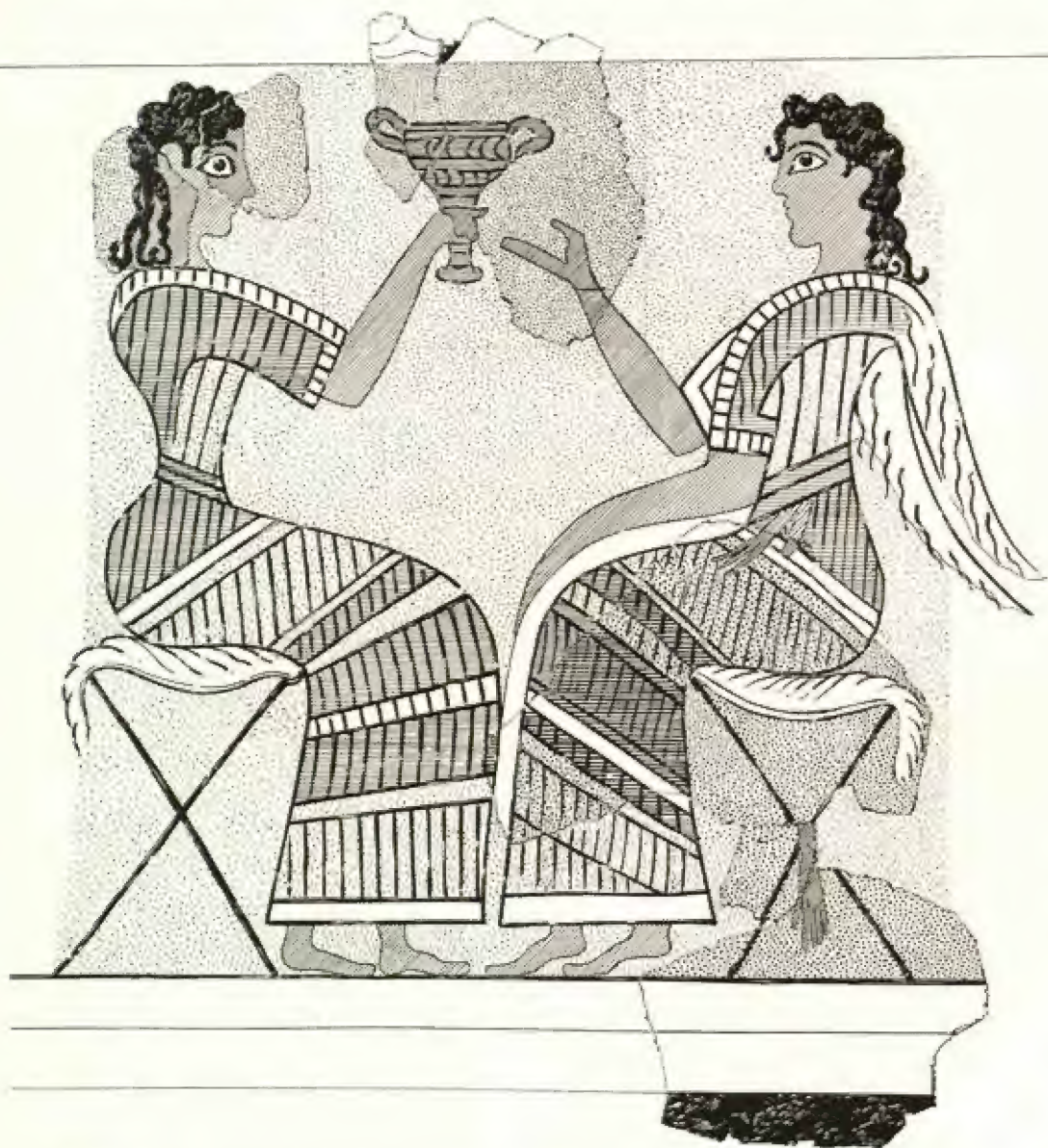


FIG. 323. TWO CONFRONTED FIGURES OF SEATED YOUTHS, ONE HOLDING OUT 'LOVING CUP' TO THE OTHER. (FOR THE COLOURS SEE PL. XXXI.)

that they originally formed part of the same group is shown by the fact that the fresco fragments above and below include parts of both.

The intimate scene here depicted of the passing over of some kind of 'loving cup' from one seated youth to the other has certainly a sacramental aspect. It may be taken to stand in connexion with a form of sacral brotherhood. It would seemingly imply in this case the plighting of a close personal relationship such as that—still well known in Greece and the

The
'Loving
Cup' and
its Sacra-
mental
aspects.

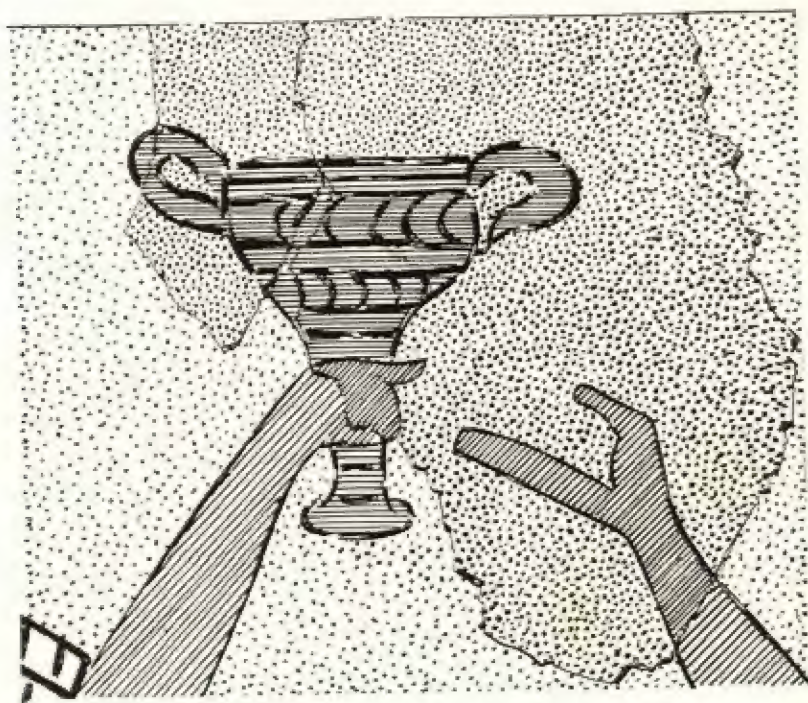


FIG. 324. SILVER 'LOVING CUP' IN VOTARY'S HAND

Balkan countries—in which brotherhood of a binding nature between two men is secured by the mingling a few drops of the blood of each in a common potion. The fellowship ratified in the scenes before us, as we may gather from the seated girl, included persons of both sexes, and seems rather to connect itself with some sacral guild in the service of the great Minoan Goddess.

From the blue ground colour of the cup itself we may infer that the material of the original was of silver. The repeated black curves alternating in their directions in its two zones, like similar decoration on painted clay 'amphoras' described above,¹ may be taken to indicate fluting. The shape of the cup, with its pedestal and two handles, is in itself significant, since,

A pedest-
tal goblet
of votive
class.

¹ See above, Pt. I, p. 275, and Figs. 208, 209.
p d 2

as shown above,¹ it corresponds with a form of votive goblet much in vogue in the last palatial Age of Knossos and in the ensuing epoch.

Alabas-
tron' like
Chalice
of Gold.

On fragment G we must recognize a ritual chalice of another class and material. There is here depicted (see Fig. 325) the forearm of another male

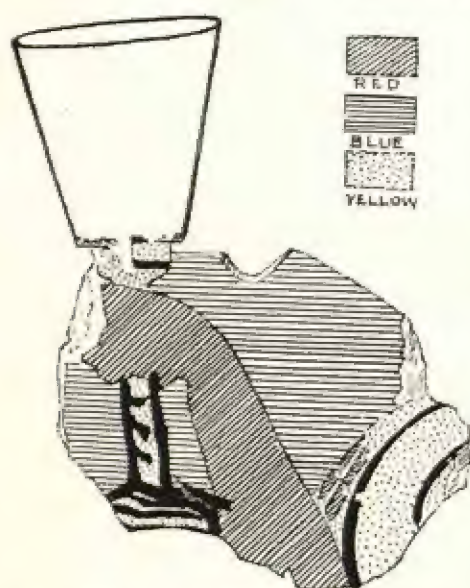


FIG. 325. GOLD CHALICE; RESTORED.

figure raised in the same manner as that of D, and also holding the pedestal of some form of cup, but in this case of a bright orange hue, clearly significant of a gold original, the black bands possibly indicating niello decoration. From its slight forward inclination it would appear that, in this case too, the bearer was about to hand it to some one in front of him, possibly the seated figure of the female votary wearing the sacral knot, which is on the same blue ground.²

The high stem of this goblet might at first sight suggest that it represented a gold version of the two-handled cup, of which a silver ex-

ample has been recognized above. The tendency to repeat similar features visible throughout these fresco remains would, in itself, tend to confirm this conclusion. But a minute examination of the details of what remained of the painted representation of the vessel at the time of its discovery shows that we have rather to deal with a different form of beaker. (See Fig. 325.)³

The stem itself is distinctly slenderer than that of the other cup. A small protruding piece of the blue background, moreover, indicates that there was a ring round the base of the cup, itself marking its junction with what was originally a pedestal made in a separate piece.

The shape—so like an ecclesiastical chalice—corresponds with that of

bility of the remains belonging to the same design.

³ The fragment is reproduced from the drawing made for me at the time of its discovery by Monsieur E. Gilliéron, père.

¹ See above, p. 365 seqq.

² Experience of the remains of fresco fragments of the same class fallen near together as were those of the 'Camp-Stool' series, shows that in such cases there is an *a priori* proba-

Gold
Chalice
compared
with 'Cup
of Nestor'
and that
of Tiryns
Ring.

a well-known XVIIIth-Dynasty type of *alabastron*, of which copies in white Cretan alabaster are known from the Fourth and Fifth Shaft Graves at Mycenae,¹ from the 'Rhyton well' (Fig. 326)² there, and from other sources.

That gold vessels of the same form had existed may be gathered from the remarkable goblet found in the Fourth Shaft Grave at Mycenae,³ which, from the doves perched above the handles, has been naturally compared with the Homeric description of the 'Cup of Nestor' (Fig. 327).⁴ The model of this seems, in fact, to have been a vessel of the same alabastron-like shape as that held in the hand of this votary of the fresco. It is natural to suppose that the pedestal of a cup of this kind might need strengthening, and the required stability has been here gained by adding two 'Vapheio' handles from which openwork supports of gold plate run to the base.⁵ The doves here, like those perched on the Minoan shrines and pillars, supply an interesting proof of the connexion of the chalice with the worship of the Minoan Goddess.⁶



FIG. 326. 'ALABASTRON'
FROM FIFTH SHAFT
GRAVE, MYCENAE.

¹ G. Karo, *Schachtgräber*, Atlas, Pl. CXXXVIII, CXXXIX, No. 600, Text, p. 118 and 854, p. 148. The pedestal of No. 600 was made separately. No. 854 shows signs of bronze fittings.

² A. J. B. Wace, *B. S. A.*, xxiv, Pl. XII B, and pp. 201, 202. Only the foot of this was found. Another complete alabaster chalice of this type, Thera (Santorin), is in the Athens Museum (No. 2964: Wace, *B. S. A.*, xxv, 1). A clay imitation occurred there in the deposit of pottery beneath the lava stratum (Renaudin, *Bull. de C.H.*, 1922, p. 127, Fig. 16.)

³ Schliemann, *Mycenae*, p. 237, Fig. 346 (much bent, as found). As restored, see now Karo, *Schachtgräber von Mykenai*, Pl. CIX, No. 412. (Text, 1 Theil, p. 100.)

⁴ *Iliad*, xi, 632-5:

Πᾶρ δὲ δέπας περικαλλές, ὃ οἶκοθεν ἦγ' ὁ γεραίός,
Χρυσείας ἤλαυνε πεπαρμένον· οἶσα δ' αὐτοῦ

τίσασσ' ἴσαν, δαυαὶ δὲ πελειάδες ἀμφὶς ἑκαυτῶν
Χρυσέαια νεμίοντο, δύνω δ' ὑπὸ πτερυγίαις ἦσαν.

⁵ These at once recall the two *πτερυγίαι* of Nestor's Cup. There were *two* doves on *two* supports in the case of the gold chalice from Grave IV. May not then the four handles rather represent the two double handles of the 'Vapheio type'? In that case the resemblance would be even more complete.

⁶ For the perched doves and their religious meaning as symbols of possession, see *P. of M.*, i, p. 222 seqq. In the kindred religion of Cyprus, doves appear in a similar connexion. They are often seen on the rim of clay vessels. Nor is it surprising to find votive terra-cotta doves and dove 'rhytons' among the Philistine fabrics of Palestine (D. Mackenzie, *Palestine Exploration Fund Annual*, 1912-13, Pl. XV, 8 and p. 55, Ain Shems; D. Macalister, *The Excavation of Gezer II*, p. 16,

What is specially interesting to note in this connexion is that a vessel of the same chalice-like form, with a triple ring clearly marked, is seen in the hand of the Goddess—for such we may suppose her to be in this case, too—seated on a folding-stool on the great signet-ring of the 'Tiryns Treasure'. This is well shown by the enlarged section of a part of the design given here in Fig. 329, *a*. Here, as is more fully shown below,¹ the liquid contents of the cup are supplied by a succession of four Genii, of the leonine Minoan kind, holding up the spouted ewers—with which they are so often associated in scenes of libation.

Basin on
a Vapheio
intaglio.

A curious parallel to the form of this chalice is moreover presented by the basin into which on an intaglio from the Vapheio Tomb, Minoan Genii are seen pouring similar libations. An enlarged photographic view of this section is given in Fig. 329, *b*, a fuller illustration being reserved for the succeeding section dealing with the Minoan Genii themselves.²

From what has been already said we seem here to have before us a series of scenes of a sacramental nature in which chalices that may, as we shall see, have contained the juice of a Sacred Tree, were passed from hand to hand, to be sipped by the seated votaries, to whom something of the divine essence was thus communicated.

Fig. 216). Orthodox Greek parallels to the dove chalice of Mycenae are to be seen in the silver Communion cups with a dove perched on the handle. A curious adaptation of this religious motive appears in a miniature silver cup from Georgia (Fig. 328). On a short pin rising within the bowl is supported a flying dove, and two are perched on its handles.

¹ See below, p. 460, Fig. 385.

² See *ib.*



FIG. 327. GOLD VESSEL FROM GRAVE IV, MYCENAE, COMPARED WITH 'CUP OF NESTOR'.



FIG. 328. MINIATURE SILVER DOVE CHALICE, GEORGIA.

May not the Goddess herself have been depicted as participating in this ritual refection?

On the Tiryns signet and a series of seal types referred to below, we have pictorial examples of drink-offerings made to her, either by ministrants in human form or by the lion-shaped Genii. Among these the best clue to the actual character of the liquid offering itself is supplied by the large gold signet-ring, of which an account is given in the last Section of this Volume, found in association with the Temple-Tomb of Knossos, and that

eventually led to its discovery. Owing to this, indeed, the term 'Ring of Minos' has been familiarly given to it.¹

In this case the Goddess is seated on a stepped altar of isodomic masonry, and beckons to a youthful male satellite, who, with one arm, pulls down the branch of a sacred tree, rising from within a small pillared enclosure, and in the other holds a 'rhyton' of the pear-shaped kind that



FIG. 329.
a, PART OF
TIRYNS SIGNET,
ENLARGED DIAMETER,
SHOWING 'ALABASTRON' HELD BY
SEATED GODDESS. b, LOWER SECTION
OF VAPHEIO BEAD-SEAL WITH BASIN IN SIMILAR
STYLE. (ENLARGED $3\frac{1}{2}$ DIAMS.)

Juice of
Tree
offered to
Goddess
on 'Ring
of Minos'.

¹ See below, § 117, Pl. I.

evidently served to hold the juice expressed from its fruit. The fruit itself is not shown on this intaglio, which simply gives conventional indications of foliage. On the gold signet-ring from Mycenae the contrary is the case, the branches bear no leaves, but terminate in what can only be interpreted as clusters of grapes. One of these bunches is there being picked by a little handmaiden of the Goddess, who stands on a small cairn, to offer it to her divinemistress, sitting fully robed, beneath the vine branches.

Fresco
Fragment
explained
as part of
Seated
Goddess.

In this connexion the small fragment, II, of the 'Camp-stool' series (Pl. XXXI II), deserves special attention. From the volute in which the upper part of the seat terminates behind¹ it is clear that in this case we have to deal with some kind of solid throne or altar base — probably of stone or stucco—in place of a folding-stool. On the other hand, the dress of the seated figure is also of a very different kind from that of those of either sex associated in this fresco with the camp-stools.

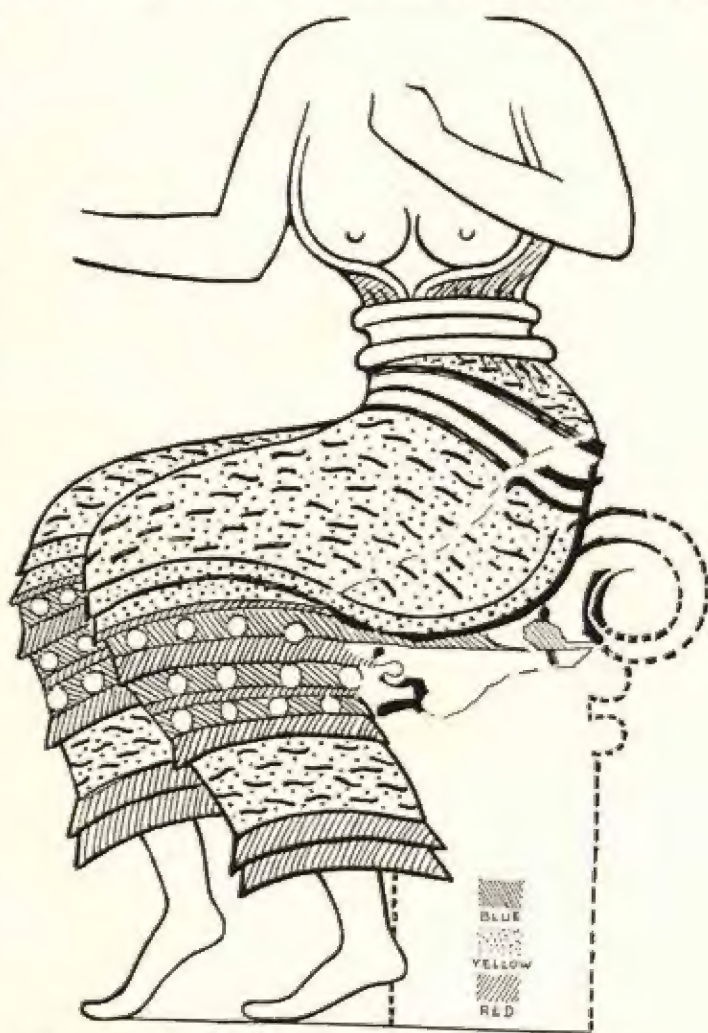


FIG. 330. RESTORATION OF SEATED FIGURE OF GODDESS, BASED ON FRESCO FRAGMENT.

¹ It is difficult to explain the black curve and indentation on the left side of the block. It looks like the edge of a moulding, but in

that case the sitting room is reduced to very narrow limits.

There remains just enough of the lower part of the gown behind to show that it was flounced in the fashionable Minoan style, such as was also generally adopted by the Goddess herself, as we see her on the two signet-rings above cited. The manner in which the nearer leg is drawn back

is also very characteristic of her attitude when seated, as shown in these and other cases, the flounced lower border being brought thus well within the front line of the seat itself.

By the light of these indications the figures associated with the throne or base in the fragment II is partially restored in Fig. 330. In it we may, in all probability, recognize a figure of

Drink offering to Goddess on Seal-types.



FIG. 331. OFFERTORY SCENE ON CLAY MATRIX FROM THE PALACE, KNOSSOS.

the great Minoan Goddess herself, participating with her votaries in this Communion Service. She must in this case be conceived, either as holding in her hand a sacred vessel to be filled by a ministrant, or as receiving it already filled. An analogy to the first alternative is afforded by the Tiryns signet, while the handing of a goblet to the seated Goddess is well illustrated by Knossian seal types.

An interesting example is supplied by the scene on the remarkable clay matrix and of a series of clay signet-impressions found in the Palace,¹ here reproduced in Fig. 331. The Goddess is seen seated on the wing of her Pillar-Shrine, above the central altar-like projection on which 'horns of Consecration' are visible. A female ministrant approaches her, bearing in one hand what may be a two-handled 'rhyton', with its orifice temporarily stopped, and in this case the sacred nature of the contents are indicated by a ring above, symbolizing a celestial orb. The attitude of the Goddess on this seal-type—as well as in the case of a practically duplicate copy, repeated on a sealing from Zakro, with the flounced leg drawn back in the same way—is exactly that suggested by the fragment II.

¹ *P. of M.*, II, Pt. II, pp. 767-70 and Fig. 498. A 'rhyton' without handles is offered in a similar way to the Goddess (there seated

on a rock) by one of her child handmaidens on a seal-impression from Hagia Triada (*Id.*, p. 768, Fig. 500).

Chronological Place of 'Camp-Stool Frescoes'.

Chrono-
logical
evidence.

For the chronological place of the 'Camp-Stool Frescoes' perhaps the best guide is supplied by their place of finding, as above mentioned, on both sides of the wall at the end of the 13th and 14th Magazines, and in near association with fragments of Palace Style 'amphoras' and jars. This evidence at least brings the wall painting to which they belonged within the limits of the last palatial Age. They cannot well be later therefore than L. M. II, while, on the other hand, the 'Triglyph Frieze', also found in this area, may itself well go back to the earliest phase of the New Palace, belonging to the great restoration of the transitional M. M. III *b*-L. M. I Age, or at latest to the partial remodelling about the close of the mature L. M. I *a* epoch.

The somewhat crude style of the workmanship does not itself involve an exceptionally late date, and indeed is paralleled by that of many of the male figures in the background crowds of the 'Miniature Frescoes', belonging to the closing M. M. III stage. The staring eyes and some other details somewhat recall the 'Captain of the Blacks', which may belong to early L. M. II. It is also noteworthy that the borders of plain bands recall in a simplified aspect those of the 'House of the Frescoes' assigned to the upper limits of L. M. I *a*. They contrast with the imitation intarsia work that seems to have been almost universally prevalent at the time of the latest redecoration of the building, and which had already begun indeed in connexion with the 'Taureador Frescoes' of somewhat earlier date. The presumption is that the 'Camp-Stool Frescoes'—as belonging to the wall decoration—were earlier in date than the 'Palace Style' vases found in the same area. This would take them at least to the early part of L. M. I *b*. The shape of the cups is consistent with this dating.

In corroboration of the somewhat early dating it may be recalled that the 'Palanquin Frescoes', which, both in the subject—including, besides long-robed personages, part of an actual folding seat—as well as in its somewhat inferior style, shows distinct affinities with the present group, seems from the associations in which it was found to have been executed before the close of the First Late Minoan Period.¹

¹ See *P. of M.*, ii, Pt. II, p. 770.

§ 101. LONG-ROBED PRIESTLY AND ROYAL PERSONAGES ON SEALS FROM
KNOSSOS AND VAPHEIO: ORIENTALIZING INFLUENCES, THROUGH CYPRUS,
ON CULT OF DOVE GODDESS—SYRIAN AXES.

'N.E. Sanctuary Hall' a Sacral College; Gaberdined costume due to Oriental influences; Similar vestments seen in 'Palanquin Fresco'; Other ritual parallels; Earlier representations of Priest-kings; Portrait on Hieroglyphic Sealings; The 'Priest-king' Relief and 'Young Prince' of H. Triada Cup; The latter wear ordinary male apparel; Attire of Male divinity also normal, though later, Resheph types show Syrian influence; Later version of Goddess in gaberdined guise, and long-robed votaries; Seal types with long-robed personages, Priest-kings and princes—from Knossos and Vapheio Tomb; Knossian seal depicting long-robed youthful figure holding dove; Early associations of Minoan Goddess with dove—parallel traditions of Anatolian and Cyprian Religion; Taken over by Semites; Partial coalescence of Cyprian and Syrian Cult with Minoan—a Hittite cylinder from Greece; Importance of Palestinian Dove Cult a Late Classical phenomenon; The Rock Dove of Cretan Cave Sanctuaries; Priestly personage leading Griffin; Armed male figures in similar long robes—personages holding single-bladed axes of Syro-Egyptian type; Origin and evolution of this form of Axe; Not normal Oriental type; Syrian influence, through Cyprus; Late example on Carthaginian silver bowl; Warrior Prince in chariot on Vapheio seal-stone; Seals of pre-Hellenic Priest-kings of Spartan region—intimate connexion with Knossos.

THE discovery of the Camp-Stool Frescoes on the borders of what on various grounds has been called the 'Sanctuary Hall', by the North-West projection of the Palace, brings them into very close relation with its central cult, so well illustrated by the noble 'Palace Style' jars and 'amphoras' derived from it, some of them exhibiting the sacred Double Axes and other ritual objects. At the same time the fact that the votaries of these wall-paintings are represented as holding chalices in precious metals may be taken to show that they belonged to the highest social rank. May the Hall itself have stood in a special connexion with some Sacral College, composed of young persons of both sexes belonging to the inner circle of the Court of the Priest-kings and including perhaps actual 'Children of Minos'?

In any case the long-robed votaries of these frescoes stand in a close

N.E.
Sanctuary
Hall a
Sacral
College?

relation to the hierarchical system in vogue in the Palace in the last epoch of its history.

Gaberdined garb due to orient-
alizing
influ-
ences.

The exalted relationship in which we must place the personages of these frescoes lends a special importance to their exceptional dress, covering the whole person, a form of costume which, as already pointed out, is entirely out of keeping with Minoan tradition. But, as will be shown, the exotic and unquestionably orientalizing character of these long robes fits in with other evidences of the intrusion during the last Palace period of other elements of an allied class from the same Eastern quarter. The intimate relations with Egypt were not broken off, but the Age in question undoubtedly corresponds with an epoch of renewed intensive influence from the Syrian side, recalling the cultural and religious wave which at the very beginning of the Age of Palaces had reached Crete from the Westwardly extended dominions of the founder of the First Babylonian Empire. In the present case we have largely to take into account the reactions of the growing connexion of the Minoan world with the Syro-Anatolian regions through Cyprus, where the process of actual colonization was already beginning, and perhaps, indeed, in the wake of contemporary commercial plantations on the Mainland coast opposite to it.

Similar
vestment
seen in
'Palan-
quin
Fresco'.

Already, indeed, in the 'Palanquin Fresco', connected with the Entrance Corridor from the South, and described in the Second Volume of this Work,¹ it seemed permissible to recognize the operation of this influence in the white-stoled ministers, whose vestments are distinguished by the dark band running down from the shoulder, and recalling the *clavus* of Roman and Etruscan usage. (See Fig. 332 *a, b*.)²

The central figure of this composition, like those of the other fresco, similarly clad and seated on a folding stool, is borne aloft, and may well be identified with a Minoan Papa Rê in his *sedia gestatoria*. The oblique wrapping of these stoles also shows a distinct analogy with the robes depicted in the Camp-Stool Frescoes, and the general style of the designs, including the summary execution, marks, as already observed, more or less contemporary work.³ The ceremonial transport of the Priest-king along

¹ *P. of M.*, ii, Pt. II, pp. 770-3, and Figs. 502, 503; see, too, A. E., *Knossos, Report 1901*, p. 20. These remains are there compared with the 'Camp-Stool' Frescoes.

² Two fragments of this are here slightly developed. (Cf. *op. cit.*, p. 771.)

³ The stratum in which these fresco frag-

ments were found contained a clay matrix with a reproduction of a signet type—itsself of L. M. I *a* date—showing a libation vessel offered to the Goddess (see Fig. 331, p. 395 above). We have here an indication of a date that cannot be much later than the close of L. M. I *a*.

this line of access has itself greatly gained in importance from the recent discovery of the actual Temple Tomb of the House of Minos lying directly on the roadway that started from the foot of the Southern slope. Other ritual parallels.

In a more general way the long robes of the votaries of the 'Camp-

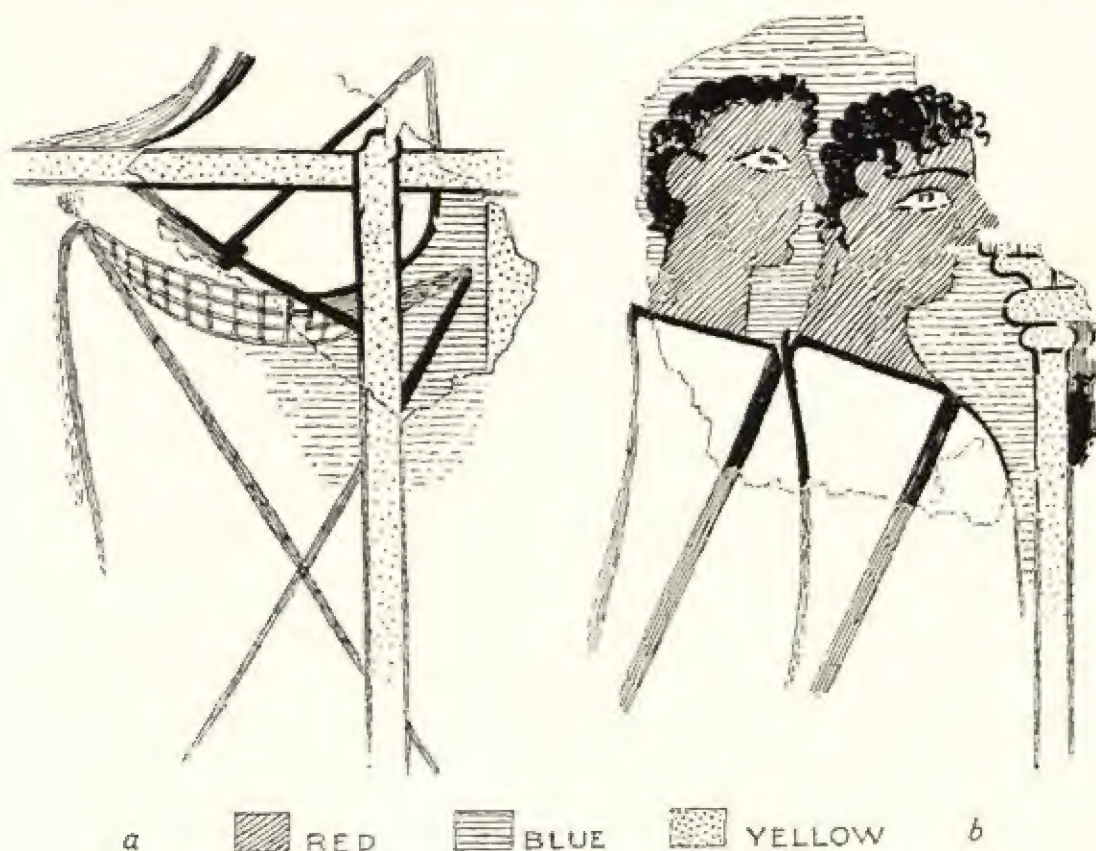


FIG. 332 *a, b*. FRAGMENTS OF 'PALANQUIN FRESCO' SHOWING WHITE-STOLED PRIESTLY FIGURES.

'Stool Fresco' may also be compared with those of certain 'gaberlined' figures—there, too, of both sexes—seen in the 'Procession Fresco', and the similar costumes of the male and female ministrants engaged in the ritual scenes of the Hagia Triada Sarcophagus.

But such long-robed presentations of the Minoan Priest-kings and their entourage are themselves quite foreign to their traditional impersonations.

The earliest glimpse that we obtain of those who held dominion in the Palace Sanctuary of Knossos is supplied by the remarkable male

Earlier representations of Priest-kings.

Portraits on hieroglyphic sealings.

heads on clay seal impressions from the 'Hieroglyphic Deposit'—one of a man with aquiline features of a strongly Armenoid type, the other of a child whom we may reasonably recognize as his young son.¹ They are associated with inscriptions in the advanced hieroglyphic script (B) presenting a sign group—presumably a royal name or title—that otherwise recurs on a prism seal associated with a 'cat' badge, possibly indicative of Egyptian connexions. These unique examples of early portraiture belong indeed to the first epoch of intensive contact with the land of the Pharaohs, and the seals themselves may date from round about 1800 B.C.

'Priest-king' relief.

Longo intervallo—the date in this case approaching the middle of the Sixteenth Century B.C.—it was natural to recognize a full figure of a Priest-king of Knossos (though in this case the profile of the face was wanting) in the painted stucco relief of the youthful personage wearing a lily crown with peacock plumes.² In the restored design he progresses amidst Elysian blooms, over which hover butterflies that, then as now, symbolized 'little souls'. His left arm is stretched out in a sloping direction, which suggests that, as on a Vapheio gem, he was leading some sacred animal—probably a Griffin—by means of a cord tied round its neck.³

'Young Prince of H. Triada Cup.

In some respects a close parallel to this is presented by the small relief of the 'Young Prince' on the steatite Cup from Hagia Triada.⁴ With outstretched arm he grasps a long staff or sceptre as he stands before the gate of his residency, and his double character as prince and priest is well brought out by the insignia held before him by an attendant officer. In one hand he holds the sword of secular power, in the other an object in which we may recognize a lustral sprinkler—analogue to the *aspergillum* of the Roman *Pontifices*⁵ and clearly indicating the spiritual side of his dominion. Both sword and sprinkler in fact recur on a cornelian bead-seal of the 'flat cylinder' kind, found South-West of the Knossian Palace, in the hand of the Goddess herself⁶ there standing 'as the patroness of the Priest-king, who was her Vicegerent on Earth'.

Ordinary male apparel.

In these cases, apart from the crown and jewellery, the royal and sacerdotal personages are garbed in the plain loin-cloth and sheath of

¹ *P. of M.*, i, p. 8, Fig. 2, *a*, *b*, and cf. *ibid.*, p. 276, Fig. 206; *Scripta Minoa*, i, pp. 271, 272, and Figs. 123-5.

² *P. of M.*, ii, Pl. II, p. 774 seqq. and Coloured Frontispiece.

³ See *ibid.*, pp. 783, 785.

⁴ *Ibid.*, p. 790 seqq., and Fig. 516.

⁵ *Ibid.*, p. 793.

⁶ *Loc. cit.*, and see Fig. 517.

ordinary Minoan men, the latter figure showing the puttee-like leg-gear. Certain figures of religious ministrants of both sexes on the Hagia Triada Sarcophagus also illustrate the widespread practice of votaries wearing the skins of their victims,¹ and the curious baggy robes, sometimes with tail-like appendages, seen on a series of figures—some of them attendants of the Goddess—upon early seal impressions have been thus explained.² On these, too, we see this costume combined with a kind of rustic corslet such as is worn in the same conjunction by the shaggy leader of the harvesters' rout on the Hagia Triada 'rhyton'.³

The ritual garb and accoutrements visible in these last-named cases, though they are connected with religious ministrations of various kinds, hardly concern the Priest-kings themselves. Like the male divinity, with whom to a certain extent the latter may be thought to have been identified, they seem, though distinguished by special insignia, to have traditionally worn the mere loincloth of ordinary male apparel. The religious conservatism as regards the male divinity is well illustrated by the Cretan seal-type showing the Young God,⁴ his divinity marked by the Sacral Horns at his feet, attended by an ewer-holding Genius and a winged goat. The chryselephantine figure of the divine Child, described below, has his loin apparel still preserved in gold plating.⁵

It is only at a distinctly later date that the traditional figure of the Minoan God begins to be replaced by the imitative images of the Syrian Lightning God, Resheph, with his cylindrical helmet, his fighting pose, and Syro-Egyptian kilt.⁶

The Minoan Goddess herself was nothing if not fashionable. She moved with the times and wears her skirts longer or shorter according to the prevailing mode. The flounced attire in which she appears from the Third Middle Minoan Period onwards no doubt reflects a general usage, though as already suggested,⁷ the flounces may have been originally copied from Oriental models, such as, in the subjects of Babylonian cylinders, were already reaching Crete by the days of Hammurabi.⁸ In the remarkable

Normal
attire of
male
divinity.

'Resheph'
types due
to later
Syrian
influence.

Minoan
Goddess
too wears
fashion-
able
attire.

¹ Cf. Paribeni, *Mon. Ant.*, xix (1908), p. 18 seqq. Dr. Paribeni did not however regard the appendage visible as actually representing a tail.

² Paribeni, *op. cit.*, p. 23. See, too, Nilsson, *Minoan and Mycenaean Religion*, p. 132 seqq.

³ See, for a full restoration, *P. of M.*, ii, Pt. I, Suppl. Pl. XVII; for the vase see L. Savignoni, *Il vaso di Hagia Triada* (*Mon.*

Ant., xlii).

⁴ See *P. of M.*, i, p. 708, Fig. 532, and cf. p. 467, Fig. 392 below.

⁵ See p. 470, Fig. 394, and p. 473, Fig. 397, *a, b*.

⁶ See *P. of M.*, iii, p. 477 seqq.

⁷ *Ibid.*, i, p. 197, and see Fig. 145.

⁸ E.g., *ibid.*, i, p. 198, Fig. 146, and *ibid.*, ii, Pt. I, p. 265, Fig. 158.

chryselephantine figure described above, in which she takes the character of 'Lady of the Sports', she combines the male loin attire of the girl taureadors who were her protégées with the corset of contemporary female fashion.

Well into the opening phase of the Late Minoan Age—if we except perhaps the tiara with its distinct Oriental associations—the costume of both the Minoan Goddess and the Youthful God was of home growth, and the same rule, as we have seen, applies to the Priest-kings who were their terrestrial representatives.

'Gaberdined' Attire—Sign of New Syrian Influences. Goddess on Tiryns Signet and Mycenae Gems.

Later
versions
of Goddess
in
gaber-
dined
garb.

But 'coming events cast their shadows before them'. The evidence already supplied by the great Tiryns signet-ring¹ shows that an orientalizing influence had already supplied the Minoan Goddess with a novel type of close-fitting gown (see above, p. 393, Fig. 329 a).

From the fine style of engraving exhibited by this design, which is fully described and illustrated below, it seems probable that its execution must be placed at least within the lower limits of the First Late Minoan Period. Two intaglios, both presumably of somewhat later date, said to have been found at Mycenae, afford further examples of the Goddess in similar attire. Fig. 333 illustrates a lentoid ring-stone² with the divinity seated on a lion's head and with two lions heraldically posed. That given in Fig. 334, and hitherto unpublished, is, like the other, a yellow cornelian,³ presenting



FIG. 333. SEATED GODDESS BETWEEN LIONS: MYCENAE.



FIG. 334. GODDESS STANDING BETWEEN LIONS: MYCENAE: SACRAL KNOT ABOVE R.

¹ See above, p. 392 seqq., and p. 460, p. 67 [165]. Fig. 45 (Franks Coll., B.M.). Fig. 385.

² From A. E., *Mye, Tree and Pillar Cult*, to have been found at Mycenae.

a standing figure of the Goddess wearing a kind of curved tiara between similar lion guardians. The 'Sacral Knot' appears in the field.



FIG. 335. SEATED FIGURE OF BOY VOTARY (PARTLY COMPLETED).

radeship with Apollo) as a double of the *Kitharoidos*.²

Although it may not be easy in the case of individual examples to find an exact parallel on the East Mediterranean side, it will be generally

¹ See *P. of M.*, ii, Pt. II, p. 836, Fig. 552, *a*, *b*. The lyres here depicted—though ultimately of Mesopotamian descent—contain an Egyptian element, as is shown by the lotus flower of *b*, combined with the ibex

IV**

heads. A form of lyre in the hands of a female player from an Egyptian wall-painting, inserted *loc. cit.*, Fig. 553, proves this to demonstration.

² *P. of M.*, ii, Pt. II, pp. 837, 838.

Long robes of the same kind were worn by male as well as female ministrants. Both the girl votary who pours the libations between the sacred Double Axes on the Hagia Triada Sarcophagus and the lyre-playing youth of the same ritual scene wear this dress, as well as another male figure from the later Palace there.¹ The appearance of the lower borders of similar long robes on two male figures of the 'Procession Fresco' has suggested their restoration as players, respectively, of the flute and lyre. We know that the Semitic lyre or *kinnor*—the Greek *κιθάρα*—is inseparable from the name of Kinyras, the Priest-king of Paphos, beloved of the Cyprian Goddess. 'As a seer and culture-hero, beautiful and master of the lyre, he would naturally appear to the Greeks (who brought him into actual com-

Long-robed ministrants.

admitted that these gaberdine-like robes, such as on the Tiryns ring and some allied seal types completely muffle the figure of the Goddess, were the result of some strong Oriental religious influence.

Illustrations
already
supplied
by 'Camp
Stool
Fresco'.

Variant illustrations of these long vestments have been given in connexion with the 'Camp-Stool Frescoes'. They are distinguished from those above described by the winding drapery of the skirts, the waist-band somewhat obliquely set, and the short sleeves. In one case we see a boyish figure with two fringed appendages to the sleeves thrown over the shoulders (Fig. 335),¹ while the well-known *Parisienne* wears what seems to be a version of the 'sacral knot' in the same position (see above, Pl. XXXI E and Fig. 319, p. 385).

Seal Types with Long-robed Personages: Priest-kings and Princes.

But, as already pointed out,² the costume of these 'Camp-Stool' figures shows a close relationship with that of which our knowledge has been supplied by a series of intaglio designs of exceptional interest, evidently depicting high Minoan dignitaries of the male sex.

Intaglios
with
long-
robed
per-
sonages.

Greatly as these designs contrast with the personage wearing the lily crown, and recognized above as an actual Priest-king, it is difficult not to assign a similar high rank to the long-robed figures of this group, though in several cases the more military side of their functions, princely rather than sacerdotal, is brought out by the arms that they bear. Amongst these, as we shall see, the recurring single axe-blade of a special type, points to the same strong influence from the Syrian side that is evidenced by their dress.

From
Knossos
and
Vapheio
Tomb.

Negative evidence can rarely be regarded as conclusive, but it is nevertheless a highly suggestive circumstance that, of the seven specimens of this type known, three are from the actual site of Knossos and one from its neighbourhood, while the remaining three are from the Vapheio Tomb near Sparta.

By a remarkable chance the largest specimen of this class (Fig. 336) was obtained by me from a native proprietor at the time of my first exploration of the site of Knossos in 1894, and there are reasons for supposing that it had been brought to light in the West Quarter of the Palace.

¹ Cf. Pl. XXXI D.

² See p. 397 seqq., above.

Intaglio showing Long-robed Youthful Personage holding Dove.

The intaglio is cut on a green jasper bead-seal representing a thick elongated development of the 'amygdaloid' class, and represents a long-robed youth holding a dove.

Youthful personage holding dove.

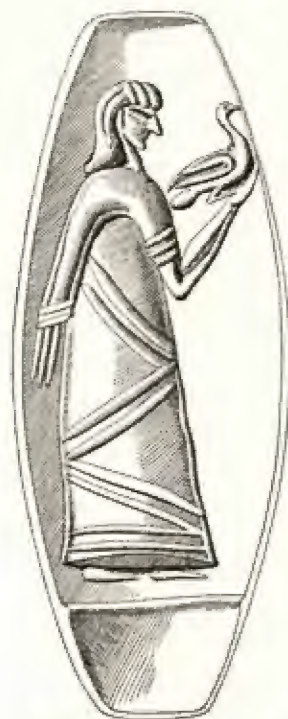


FIG. 336. LARGE INTAGLIO SHOWING YOUTHFUL PERSONAGE HOLDING DOVE: KNOSSOS. (J)

The fringed appendage of the robe seen in Fig. 336, which falls down the back and connects itself with a short sleeve, presents a distinct parallel to the dress of the boy referred to belonging to the 'Camp-Stool' series above reproduced in Fig. 335, though in that case two fringed ends hang down presenting a wing-like appearance. The oblique position of the waist-band with a band below sloping in the opposite direction is also a recurring feature of conformity.

The youth or boy seen in Fig. 336 has abundant locks of hair falling about his shoulders. The bird that he carries may naturally be regarded as an offering to a divinity, and there can be little doubt that it is intended to represent a dove. Though the neck is somewhat elongated, the bill, so far from being slightly upturned, as in the case of a duck, is definitely hooked at the point, like that of a pigeon. What is decisive, however, is the careful insertion of the swelling at the upper extremity of the bill (see Fig. 337, *a*) well defined in the intaglio.

Characteristic beak.

This is a well-known characteristic of doves' beaks, as is shown in the sketch of a rock-dove's head placed here for comparison in Fig. 337, *b*.

Fundamental Affinity of Minoan Dove Cult with Syro-Anatolian.

The association of the Minoan Goddess on her celestial side with the dove corroborates the conclusion that this offertory design represents that bird and no other. Already by the mature stage of M. M. I the 'dove-vase' from the Palace site¹ and the bowl with a flying dove moulded in it from the Bone Enclosure at Palaikastro² suggest a ritual connexion. In the case

Early associations of Minoan Goddess with dove.

¹ *P. of M.*, i, p. 146, Fig. 107.

² *Ibid.*, p. 181, Fig. 130a. Cf. R. C. Bosanquet, *B.S.A.*, viii, p. 294.

of the 'Terra-cotta Shrine' belonging to the Second Middle Minoan Period the sacred doves are seen perched on the shafts of the columnar shrine as the visible token of divine possession.¹ So, too, the dove, as well as the snakes that symbolize her chthonic connexion, is associated with the clay cylinders of the early domestic cult,² and in the case of the figure of the Goddess in the later 'Shrine of the Double Axes' a dove is settled on her head.³

Equally
an 'Old
Anato-
lian Cult'.

In this connexion it may be well to point out that the conclusions so carefully drawn by Victor Hehn from Classical and Semitic sources as to the date and origin of the dove cult in Greece,⁴ require radical revision in the light of more recent discoveries. The later assimilation of Astarté with the dove Goddess of Cyprus and the Syrian coasts, and the strange mythical transformation of Semiramis (Sammuramat), the historic queen of Assyria of the latter half of the ninth century B.C., into a sacred dove,⁵ and her actual transportation from Nimrūd to Ascalon had led to a general assumption of a Semitic origin.



FIG. 337. a, BIRD HELD BY VOTARY ON GEM; b, ROCK-DOVE'S HEAD.

Dove cult
taken
over by
Semites.

It is all part of the *Mirage orientale*. The idea of an early connexion of Ishtar with the dove, or indeed with any bird, appears to be quite unwarranted: ⁶ her emblem, indeed, as, primarily, the Goddess of War, was the lion. The specialized dove-cult, on the contrary, beyond all reasonable doubt, was taken over by the Semites from the Syro-Anatolian ethnic group of which we have traced a Western extension in an important ingredient of the early Cretan population. It was this element, indeed,

¹ *P. of M.*, i, p. 220 seqq., and Fig. 166, v.

² See above, p. 143, and Fig. 110, s (p. 141).

³ *P. of M.*, ii, Pt. I, p. 340, Fig. 193, a 1, a 2.

⁴ *Kulturpflanzen und Haustierte in ihrem Uebergang aus Asien nach Griechenland und Italien* (ed. 2. 1874), p. 291 seqq.: *Die Taube*.

⁵ Lucian, *De Dea Syria*, c. 14. For Semi-

ramis see especially C. F. Lehmann-Haupt, *Klio*, i (1900), p. 665 seqq.; and his Art. *Semiramis* in Roscher's *Lexikon*, v.

⁶ So high an authority as the late L. W. King writes: 'I have little doubt that the association of a bird with the cult of Ishtar was a comparatively late addition.' (In letter to Prof. John Garstang; H. A. Strong, *The Syrian Goddess*, &c., p. 86.)

physically described as proto-Armenoid and well represented by the Hittite monuments, and which emerges at Knossos in the royal seal-types of the 'Hieroglyphic deposit'—that seems to have supplied the facial profile later ascribed to the Hebrews.¹

At Knossos, as we have seen, the connexion of the dove with the central cult may be traced back to the beginning of the Second Millennium, B.C., nor can we forget the artistic carving of the ivory seal of E. M. III date² in the form of a dove sheltering her nestlings beneath her wings. An amuletic pendant of chalcedony, moreover, in the form of a dove was found in Tomb IV at Mochlos,³ recalling similar objects from Early Cycladic Graves.⁴

In Cyprus the evidence of the dove cult goes back into the Copper Age, and is well illustrated by a series of clay vessels, often ring-shaped with three or four feet, on which are doves accompanied by libation vases and rude female figures.⁵ Later on, in the period of intimate contact with Crete—which seems to find its inception in L. M. I b, and is characterized by cylinder-seals with religious representations of what may be called a 'Cypro-Minoan' class⁶—we witness a kind of fusion of Cypriote and Minoan ideas regarding the Dove Goddess. The bird perched on the little temple before the adoring figure on the Cylinder from Old Salamis⁷ (Fig. 338) recalls the miniature gold shrines with the perched doves from

Parallel
antiquity
of Cy-
priote
dove
cult.

¹ F. von Luschan, *Huxley Memorial Lecture for 1911: The Early Inhabitants of Western Asia*, p. 240 seqq., and Plates XXIV, XXV, XXX-XXXII (*Journ. R. Anthr. Inst.*, xli). Von Luschan refers (p. 242) to his convincing identification of the later 'Jewish' physiognomy with this early 'Syro-Anatolian' element, first put forth by him in 1902. The prevalence of a brachycephalic type with a distinctly Armenoid profile among the Omani of S. Arabia, now established (Sir Arthur Keith and Dr. W. M. Kroyman, App. I to Bertram Thomas, *Arabia Felix*, 1932), does not stand in the way of this conclusion as the type is clearly intrusive in that area. The Aryan Kurds have taken over this type in the same way as the Jews (see *op. cit.*, Pl. XXV). Von Luschan quotes the *Song of Songs*, vii, 4 for the Jewish ideal of beauty. 'Thy nose is like the Tower of Lebanon which looketh towards Damascus.'

² *P. of M.*, i, p. 117, Fig. 86, a, b; see Xanthudides, *Faulted Tombs of Mesará* (transl. Droop), Pl. IV, 516, and p. 30 (Tholos B).

³ Seager, *Explorations in the Island of Mochlos*, p. 40, and Fig. 20, 7. Cf. *P. of M.*, i, p. 102.

⁴ E.g. Tsountas, *Κυκλαδικά* I and II; 'Εφ. 'Αρχ.', 1918, Pl. VIII, 16, 17, 23; 1899, Pl. X, 27, 28.

⁵ A set of such vessels was found in Tomb 13 at Paraskevi; see Ohnefalsch-Richter, *Kypros, die Bibel und Homer*, Pl. CLXX. (Compare Pl. CLXXIII: Tomb 22). Cf. *ibid.*, text, p. 283 seqq., and Figs. 181-6.

⁶ In my *Myc. Tree and Pillar Worship* (p. 50 [148] seqq.) I referred to this class of cylinders as 'Cypro-Mycenaean'.

⁷ Cesnola, *Salamina*, Pl. XIV, 45; Ohnefalsch-Richter, *Kypros &c.*, i, p. 291, Fig. 197 &c.

Mycenae. On a Syro-Hittite cylinder (Fig. 348 *b*) a dove appears above the table of offerings.

Unfortunately, as regards the closely allied Syro-Hittite class, it is precisely in the Cilician region opposite Cyprus, included between the Taurus and Amanus ranges, that Hittite monumental evidence fails us. It is, indeed, in this mainland region that we should naturally find the best intervening links with Cyprus, while at the same time names of persons and places recur that are bound up with the earliest traditions of Crete.



FIG. 338. CYLINDER FROM OLD SALAMIS
SHOWING DOVE PERCHED ON SHRINE.

What associations with the residential seat of Minos himself are not called up by Cilician names like *Mnôs* and *Knôs*! The Kory-

kian Cave sanctuary, where these occur, shares its name with a promontory of North-Western Crete, while Mallia—the site of the early Palace in its more Easterly region—and other similar place-names, suggest the renowned Cilician town of Mallos, the mention of which in Egyptian lists is so often found before that of the 'land of Kestiu'.

So far, however, as Cyprus is concerned, the lacuna in the archaeological evidence is partly bridged by the occurrence of certain cylinder types which, though acquired or found in the Island, may have at times been executed in the opposite mainland region. Among these are designs showing, as accessories to the main subject, and on a smaller scale, Griffins and Sphinxes, lions, ibexes, and other animals, often in double rows, and accompanied with a 'chain' or *guilloche* pattern. In a general sense such cylinders must be grouped with the widely diffused 'Syro-Hittite' class, of which there seems to have been a Cilician branch.

Coalescence of Syrian and Cyprian Dove-cult with Minoan: a Hittite Cylinder found in Greece.

Another cylinder from Salamis¹ fits on very closely to this series. On it, with a small lion and griffin behind, two votaries are depicted offering a bird—here reasonably identified with a dove—to the Goddess.

¹ Cesnola, *Salaminia*, p. 121, Fig. 115.

This composition, moreover, shows a definite parallelism with that from a cylinder bought at Aleppo¹ (see below, Fig. 348 *b*, p. 421), and presumably belonging to a mainland Syro-Hittite group. On this a princely votary wearing a characteristic Hittite fringed mantle stands before a table of offerings upon which a dove settles. Before the dove is a star, and behind it is the seated Goddess.

What we have at this time to deal with is the actual reaction of this Syro-Anatolian cult on the Minoan World.



FIG. 339. SYRO-HITTITE CYLINDER OF LAPIS LAZULI FOUND AT VARI, SOUTH OF ATHENS, SHOWING SEATED GODDESS HOLDING DOVE. ($\frac{2}{3}$.)

An interesting variation of a similar scene appears on a pale blue lapis lazuli cylinder found at Vari, South of Athens, and here reproduced in Fig. 339.² It is evidently of the same Syro-Hittite fabric. On it we see the enthroned Goddess with the dove—its fan-tail well displayed—perched on her outstretched hand. In front a small votary holds a kid and a looped object. Behind is a flounced male figure, and another, perhaps representing a Hittite prince, receives a similar offering of a young animal from a long-robed personage, standing on a crouched beast. The spiral border—so characteristic of this Syro-Hittite class of seals—appears here, above and below the seated Goddess. The cylinder itself was found with Mycenaean objects including blue paste plaques impressed with rosettes of a kind that synchronizes with L. M. III *a*. Its finding on Greek soil is itself an interesting illustration of the reaction at that epoch of elements derived from the East Mediterranean region with which its style is connected.

¹ At the end of the Section: cf. Hogarth, *Hittite Seals*, Pl. VI, 175 and p. 65.

² From the Collection of Monsieur M. P.

Vlasto, thanks to whose courtesy I am able to reproduce it here. The drawing is by Monsieur E. Gilliéron, fils.

Analogies for Dove Goddess of the Cylinders supplied by Hittite Reliefs.

The above cylinder type illustrating the contemporary dove cult on the Oriental side, finds specially close analogies with certain Hittite

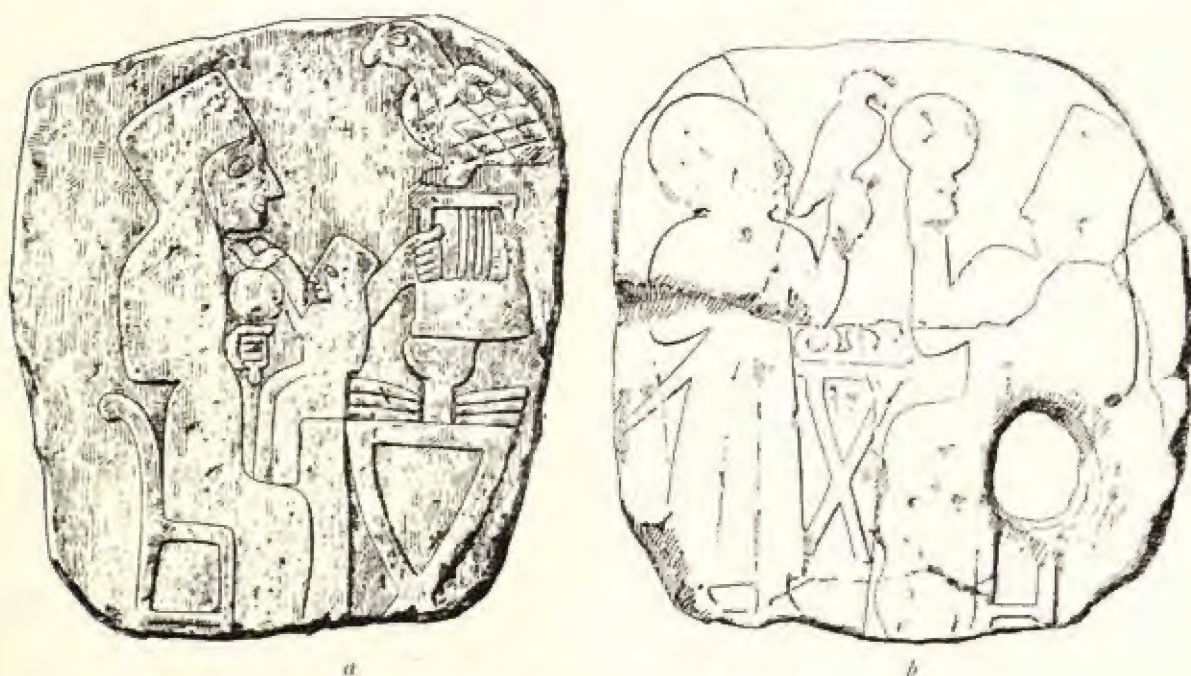


FIG. 340 *a, b*. HITTITE RELIEFS FROM MARASH.

religious reliefs. On that, here reproduced in Fig. 340, *a*, from Marash,¹ the bird above the lyre held by the seated female figure, both from its general appearance as well as from the character of its beak, may be fairly regarded as a dove. It reappears in a more mutilated form on another slab (Fig. 340, *b*) from the same Hittite site. On this the dove is offered by a long-robed priest to the tiara'd divinity, who holds a mirror. In the former

¹ This and Fig 340, *b*, are from Humann u. Puchstein, *Reisen in Kleinasien, &c.*, Atlas, Pl. LXVII, 2. A similar relief with the bird on the altar occurs at Yarre on the Sangarius (see T. W. Crowfoot, *Exploration in Galatia cis Halym: J. H. S.*, six, p. 41, Fig. 4). Another was found at Fraktin (Ferak ed-din, South of the Cappadocian Caesarea). See Ramsay and Hogarth, in Mas-

pero, *Recueil de Travaux*, 1893, p. 87, Pl. VI; Chantre, *Mission en Cappadoce*, Pl. XXIII. Cf., too, J. Garstang, *The Land of the Hittites* (1910), Pl. XLVII, and p. 151, where he is uncertain about the bird. In *The Syrian Goddess* (1913), however, he recognizes it (pp. 24, 25) as 'doubtless a pigeon or dove'. It is to be observed that in that case the Goddess wears a conical cap.

case she is holding an infant, and must be certainly recognized as the great Anatolian Goddess Ma.

So far from emanating from any Semitic source, this dove-cult shared *ab antiquo* by Cyprus and the Minoan World, only appears to have become a pronounced feature in the Palestinian Coast towns at a comparatively late date. The evidence of recent excavations in the earlier strata of these regions is consistently negative, and it is only in a quite advanced Classical stage that the records of the Dove Goddess at Ascalon and elsewhere come to the fore. On the Hittite monuments and cylinders, on the other hand, as we have seen, there are relatively early indications of the cult.

The truth is that the Classical writers from whom was due our earlier information about Derketo (Atargatis), the 'dove' Semiramis and the rest, saw everything through a Semitic medium, and in an already Semitized shape the sacred doves of Palestine had themselves become a special white breed.¹ But it is now recognized by zoologists that the rock-dove (*Columba livia*) is 'without contradiction the parent stem of all our domestic pigeons'.² Nor can any one acquainted with the caves and rock shelters, which in Crete (as in the related East Mediterranean area) were the earliest sanctuaries, doubt that this was the original Sacred Dove of all these regions. In Crete, indeed—apart from migratory turtle-doves—it seems to be the only indigenous species,³ and swarms of these birds still haunt the inmost clefts of such old centres of Minoan cult as the Diktaean and Kamares Caves or the great vault of Skoteinò in the Knossian region, long unfrequented by human votaries.

The rock-dove, like all our native pigeons, is, on the whole, of a somewhat sombre or dusky plumage—the word 'dove', as is well known, having that signification in the Aryan languages, and answering indeed to the old Irish *dubh* = black. So, too, the doves of Dodona,⁴ the earliest recorded seat of the cult among the Hellenes,⁵ are described—like those of the twin

Importance of Palestinian Dove Cult a late phenomenon.

The Rock-Dove.

Still haunts old Cretan cave sanctuaries.

¹ 'Tibullus' lines (1, vii, 17: ed. Postgate) sum up this aspect:

Quid referam ut volitet crebras intacta per
urbes

alba Palaestino sancta columba Syro.

² See the article 'Doves' in *Enc. Britannica* (1907 ed., p. 379) by the eminent ornithologist, Professor Alfred Newton.

³ This—noted as 'common in sea caves'—

and the migratory turtle-doves were the only species observed by the naturalist and explorer Trevor-Battye (see *Camping in Crete* p. 262).

⁴ The rocky nooks about Dodona make it quite possible that we have there, too, to deal with *Columba livia*.

⁵ See especially, A. B. Cook, *Zeus*, i, p. 364 seqq.

Oracle of the Libyan Oasis—as 'black'.¹ In later Classical days, indeed, they were misdescribed as 'snow-white'.²

Long-robed Priestly Personage leading Griffin.

The red jasper lentoid seal from the Vapheio Tomb (Fig. 341)³ presents a male figure in a long winding robe whose function in leading the sacred Griffin leaves us in no doubt as to his sacerdotal character.



FIG. 341. SACERDOTAL FIGURE LEADING GRIFFIN: ON JASPER LENTOID, VAPHEIO TOMB (3).

¹ Herodotus ii. 55 makes two 'black doves' (παρακάδας μελαίνες) fly from the Egyptian Thebes, one to Dodona, the other to Libya. Characteristically, in the variant account of this given by Silius Italicus (iii. 675-91), the doves become 'snow-white' (niveis alis), so as to correspond with the colour of the 'sacred doves' from Palestine, only known to the Greeks from the time of the Persian Wars. Charon of Lampsacus (cited by Athenaeus, ix, 394, e) speaks of them as first met with on the occasion of the shipwreck of the Persian fleet off Mt. Athos. Varro's description of an Italian farm (*De Re Rustica*, iii. 7) supplies an interesting record of a succeeding stage in which the two classes of pigeons existed side by side and were producing a cross-breed (*miscellum genus*). The tamer kind was white and were fed *intra limina ianuae*. The wilder are described as a *genus*

This personage holds a rope that passes under the guardian monster's wing and is attached to its neck. The Griffin, here, with its well-marked crest of plumes and eagle's beak, much resembles those of the painted stucco relief from the great East Hall, attached by a cord round the neck to the column⁴ that is there the baetylic representative of the Minoan Goddess herself. In that case, too, the monsters stand on a triple gradation. So, too, on two of the seal-types described above⁵ with

saxatile—clearly rock-doves—and found roosting places in the turrets and gables of the Villa.

² As Victor Hehn has well shown, *Kulturpflanzen und Haustiere* (1874), p. 295, so lost to the Greeks were the earlier connexions with the Paphian cult, that in the Homeric Hymn to Aphrodite doves are not even mentioned in connexion with her, while in Sappho's Ode to her as preserved in Dionysius of Halicarnassos (fr. 1 Bergk) such ignorance is betrayed of the persistent dove-cult of Cyprus that her ear is drawn through the sky by swifts (ὄρνιθες ἀραιόθυτοι).

³ Tsountas, Εφ. Ἀρχ., 1890, Pl. X, 32, and p. 167; Furtwängler, *Antike Gemmen*. Cf. *P. of M.*, ii, Pt. II, p. 785, Fig. 512, from which Fig. 341 is reproduced.

⁴ *P. of M.*, iii, p. 510 seqq., and Fig. 355.

⁵ See above, p. 169, Figs. 130, 131.

the 'Snake frames', the Goddess herself appears between two guardian Griffins standing on raised cornices. A comparison has already been made between this design and the relief of the youthful dignitary wearing the lily crown, and it is a fair conclusion that in both cases we have to do with the effigy of a Minoan Priest-king leading the sacred Griffin.



FIG. 342. PERSONAGE WITH BOW ON HAEMATITE BEAD: KNOSSOS. (LOWER PART WITH FEET RESTORED.) (1)

Armed Male Figure in similar Long Robes, with bow.

In the last two instances the religious side of these long-robed personages is to the fore. The offertory dove stands surely in relation to the Minoan Goddess in her celestial aspect. In the figure beside the Griffin, again, we see a direct minister of the divinity.

In the remaining cases, however—in all of which the figures hold weapons—it is the military and secular aspect of Minoan princes that is brought into prominence. In the early days of my Cretan explorations, somewhat later than the discovery of the dove-holding type, the less perfect bead-seal, Fig. 342, was brought to me from the site of Knossos.

The material is haematite, and the lower margin of the stole is wanting in the original. It shows a curved object rising up by the right shoulder, in which we may recognize the end of a 'horn-bow' of the Asiatic class, the actual material for the composition of which is shown on a series of clay tablets from the 'Armoury'.¹

Figure with horn bow.

Personages holding Single Axes of Syro-Egyptian Type.

Three figures hold single axes of the single-bladed Syrian form, all of them on haematite bead-seals of amygdaloid form (Fig. 343, *a, b, c*). Of these, *a*, found at Vatheia in the Knossian district, may perhaps be recognized as the same youthful personage as Fig. 336. His hair falls in a similar manner about the back of his neck, while in this case there is an additional touch of elegance in the attitude and dress, the borders of which show tassels.² The young prince—for such we may regard him—stands as

Personages holding single-bladed axe of Syrian type.

¹ See below, p. 832 seqq.

² Compare the tasselled fringes of some of the men's dresses of the Thisbê series (A. E., *Ring of Nestor*, &c., p. 28).

if advancing towards the left, but with the upper part of the body and head turned back, the left arm being lowered with open palm as if in the act of greeting. There is something free and instantaneous about the action.

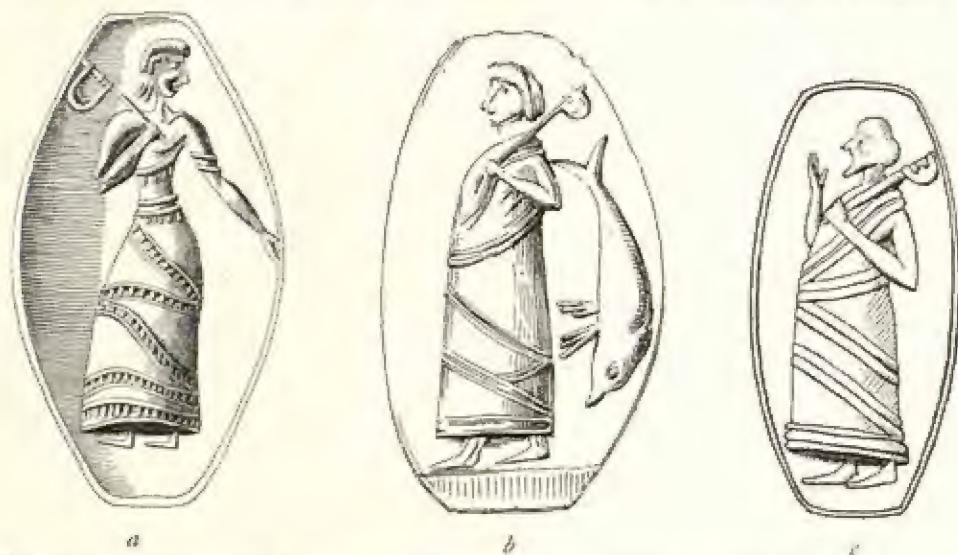


FIG. 343. PRINCELY AND SACERDOTAL PERSONAGES HOLDING SYRIAN AXES ON HAEMATITE BEAD-SEALS: *a*, VATHEIÀ, NEAR KNOSSOS; *b*, NEAR 'ROOM OF THRONE, KNOSSOS'; *c*, VAPHEIO TOMB. (?)

The dolphin in the field of Fig. 343, *b*, from a doorway near the 'Room of the Throne', may itself be regarded as a personal badge of the princely (and pontifical) individual there portrayed, perhaps the same personage as that shown in *a*. It would thus find a parallel to the Cat type,¹ coupled with what seems to have been the hieroglyphic title of a Minoan ruler, whose portrait is preserved on M. M. II clay sealings referred to above.

On the Vapheio bead-seal (Fig. 343, *c*) of the same form and material, the axe-holding personage shows an abnormal projection of the chin. This may possibly be interpreted as a short beard, but is more probably the effect of the summary character of the engraving.

The Syro-Egyptian Axe Type.

The form of single-bladed axe that recurs on three of these intaglios—two from Knossos and one from the Vapheio Tomb—is of great interest as bearing on the whole history of their ritual costume. It corresponds with

¹ Found in 1908, just beneath the surface of the narrow, Eastern doorway of the 'Room of the Stone Drum'.

a special type of axe, the evolution of which can be traced back in Egypt to the beginning of the Middle Kingdom, but which in the final stage of its development is specially characteristic of the Syrian lands and the regions

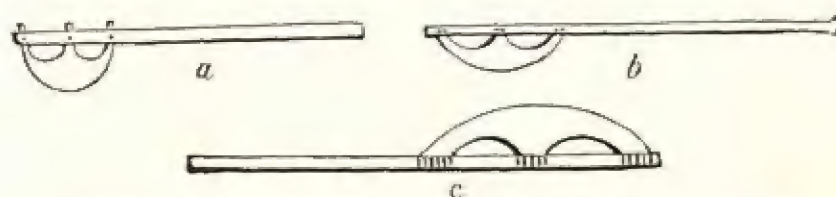


FIG. 344. EGYPTIAN AXE-TYPES : *a*, XIIth DYNASTY : *b*, *c*, LATER.

influenced by them, like Cyprus. Copper axes with rounded blades go back to the first Egyptian Dynasty¹ and, later on, a compromise was made with the straight-edged form, its ends being carried back and thus drawn to the haft, leaving a more or less circular interval between the blade and the shaft. Axes of this type occur on XIIth Dynasty monuments (Fig. 344, *a*),² and survive in a broader shape into later Dynasties (Fig. 344, *b*, *c*), and it is also clear that by that time it had become naturalized on the Syrian side. A Middle Kingdom example of this class, apparently of Syrian fabric, from the 'Tomb of the Courtiers at Abydos',³ is given in Fig. 345, *a*, *b*, and an almost identical specimen of the same approximate date occurred in a hoard of implements found in Central Syria.

The round blade of the early Egyptian form was inserted in the haft and attached by rivets, and the recurved ends of the later type are seen in its primary stage in Fig. 344, *c*. At a somewhat later epoch, to which the axes on the Minoan seal-stones belong, the looped attachments had become continuous sockets, as shown in the specimens, Figs. 345, *c-e*.⁴ Of these *d* and *e* are from Cyprus, others similar are from Beyrût, and this in fact

¹ Petrie, *Tools and Weapons illustrated by the Collection of University College, London*, p. 7. 'These round axes are peculiar to Egypt.'

² E.g. Lepsius, *Denkmäler*, ii, Pls. CXXXII and CLXI (XIIth Dyn.). See, too, Wilkinson, *Ancient Egyptians*, ed. Birch, 1878, p. 215, Fig. 48 from which Fig. 344 is taken. Montelius, *L'Âge de Bronze en Égypte*, Pl. V, 32, 33, pp. 40, 41; Budge, *Egyptian Bronze Weapons*, &c., *Archæologia*, liii, Pl. II, 4, 5, 7, Pl. III, 3.

³ Petrie, *British School of Archaeology in Egypt, Abydos, &c.*, 1925, Pl. V, 28 and p. 6 (presented to the Ashmolean Museum). It was found, together with a remarkably developed blade (20 inches long) with holes for attachment to a stick, described by Petrie as obviously of Middle Kingdom date. He regards the axe as of Syrian fabric.

⁴ W. Greenwell, *On Some Forms of Bronze Weapons and Implements*, *Archæologia*, lviii (1902), pp. 13, 14.

represents the fully developed Syrian type. An interesting example, from the British Museum (Fig. 345, *c*),¹ combines with this Egyptianizing Syrian type an animal relief, in this case a lion seizing a ram, a method of

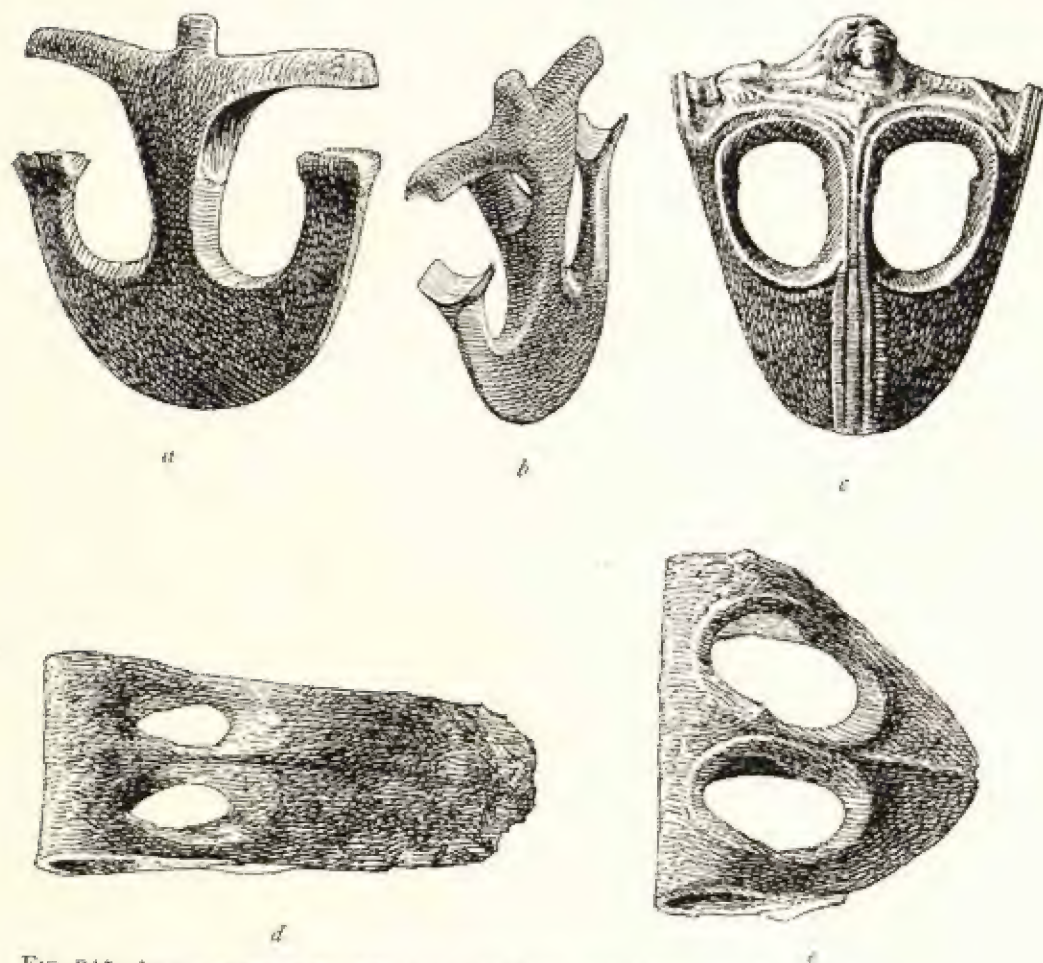


FIG. 345. ANTECEDENTS OF THE SYRIAN AXE TYPE: *a, b*, ABYDOS; *c*, SYRIA; *d, e*, CYPRUS.

decorating weapons that finds much more remote antecedents in Sumerian Art. We have already seen an offshoot of this in the ceremonial axe of schist from the Palace of Mallia, the butt end of which takes the form of a panther.² This belongs to the M. M. I *a* Period and the Age of Hammurabi,

¹ *British Museum Quarterly*, iv, 4 (1930), PL LX, *a*. See, too, R. Dussaud, *Syria*, xi (1930), pp. 252, 253, and Fig. 13.

² *P. of M.*, ii, Pt. I, p. 274, Fig. 164. Cf.

J. Charbonneau, *Monum. et Mém. Piot*, xxvii, p. 1 seqq.; F. Chapouthier et J. Charbonneau, *Fouilles exécutées à Mallia, Premier rapport*, p. 59.

while that with the lion and ram must be referred to an epoch approaching that of those borne by the axe-bearing personages of our Minoan signet types.

The ceremonial Axe of Mallia—surely, like the giant sword that accompanied it, part of the actual regalia of a local Priest-king—with its downward curving blade and ornamented butt, represents a variant of a true Oriental form, going back, like its animal decoration, to Sumerian models of the Fourth Millennium B.C. The Chaldaean form with a many-spiked butt is disseminated to Persia on one side¹, and throughout Hittite Asia Minor² on the other, and appears in the hands of a Hittite warrior on a relief at Boghaz Keui. A secondary derivation of this type of axe with long curving blade was transported, apparently by Phoenician agencies, to the Adriatic Coastland embracing Southern Dalmatia and North Albania.³

Distin-
guished
from true
Oriental
type
like that
of Mallia.

In Crete, apart from the ceremonial weapon of Mallia, axes of this Asiatic kind are not found, though single axes of ordinary type occur not infrequently among the hieroglyphic signs,⁴ and are found in derivative shapes in both linear Classes. We have some hints that these, too, at times stood in a religious connexion,⁵ but the usual type of implement both for ordinary use and for sacral purposes was the double axe.

Its ritual prominence, indeed, makes it the more remarkable that in the last palatial Age these long-robed figures should make their appearance holding single-bladed axes of a Syrian class. It must be certainly taken to indicate that a very strong politico-religious influence was making itself felt at this epoch—whether coming from Syria itself or, as seems most probable in a main degree from Cyprus, now in the course of Minoan colonization, possibly also from some vantage port on the opposite Cilician Coast. It is to be observed that both the longer and the broader versions of the Syrian axe shown in Fig. 345, *d, e* are from Cyprus.⁶

Syrian
influence
through
Cyprus.

The persistence of this Syro-Egyptian type is, however, best illustrated in the great Tyrian foundation of the North African shore. On the

¹ R. Dussaud, *Syria* xi (1930), p. 268 seqq (from Nihavan).

² A good illustrative specimen was found by Mr. Allen Rowe at Beisan in Palestine, who compared it with that of the Boghaz Keui relief (*Mus. Journ. of Palestine*, 1926: see, too, J. Garstang, *The Hittite Empire*, p. 86, and Pl. XIV).

³ New evidence on this provenance of the Adriatic bronze type was brought forward by Dr. R. Vulpi at the International Prehistoric and Protohistoric Congress in London, 1932. (See *Istros* (Bucarest, 1934), p. 45 seqq.). A speci-

men from a hoard of bronze axes of this type, found near Castelnuovo (Novi) in the Gulf of Cattaro is in the Ashmolean Museum.

⁴ *Scripta Minoa*, i, p. 185, No. 19. Other examples of this type on hieroglyphic seals have since come to my knowledge.

⁵ For figures, of both sexes and apparently of a religious character, with appendages like the single blade of an axe, see *P. of M.*, i, pp. 615, 616, and ii, Pt. I, pp. 248, 249.

⁶ In the Ashmolean Museum.

embossed silver bowl from Paestrum, dating from round about 700 B.C., the Nimrod of Carthaginian travellers' tales wields an axe of this traditional form in his attack on the gorilla-like pair (Fig. 346).¹

Axe of
Syrian
type from
Vapheio
Tomb.

In the Vapheio Tomb,² moreover—in the grave cist itself and associated with the gold cups and other precious relics—an actual specimen of a bronze axe of this form came to light, reproduced in Fig. 347. This so far differs from any known Syrian example in being provided with three separate loops to enfold the haft in place of any kind of continuous socket. It may therefore be of local fabric, and must be classed as a Minoan variety.



FIG. 346. SCENE ON SILVER BOWL FROM PAESTRUM: HUNTER ATTACKING GREAT APES WITH A SYRIAN AXE.

Its appearance in the Tomb is of great interest, since we may fairly recognize in it the actual weapon of the Minoan prince—also exercising sacerdotal functions—to whom must also probably be attributed the three seal-stones exhibiting such figures that were found together with it. In one case (Fig. 341), the religious character of the gaberdivined personage is fully brought out by the sacral monster that he leads. On another Vapheio bead-seal he stands alone holding an axe of this Syrian form (Fig. 343 c). The third gem of this class found in that Tomb, a sardonyx lentoid given

¹ See Clermont Ganneau's brilliant interpretation of the scenes on this bowl in *Imagerie phénicienne*, i, p. 38, and Plate opp. p. 156, Section VIII (also *Journal Asiatique*, 1877) from which Fig. 346 above is excerpted. In Helbig (*Bull. dell'Inst. &c.*, v, 117-31, and *Ann. dell'Inst. di Corr. Arch.*, 1876, pp. 54, 55) the form of the weapon is not clearly given, while in P. and C., *Histoire de l'Art*, iii (Phénicie-Chypre), the object is described,

p. 176 (cf. p. 759, Fig. 543) as a 'club'. The 'gorilla skins' were hung up in the Temple at Carthage; perhaps the axe was also taken from a temple reliquary. For Hanno's account of the animals, see his *Periplus* (in *Geogr. Gr. Minores*, i, 13, 14).

² Tsoantzas, 'Εφ. 'Αρχ., 1889, pp. 155, 156, and Pl. X, 1. Its breadth (horizontally) is 14.5 cm and its height the same.

here in Fig. 348, brings out even more fully his character as a warrior prince though here he bears a different weapon.

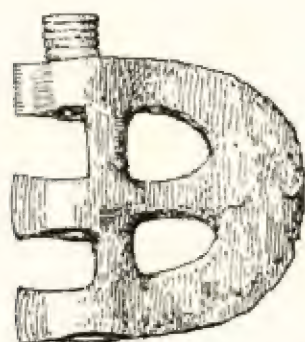


FIG. 347. BRONZE AXE OF SYRIAN CLASS FROM VAPHEIO TOMB: PROBABLY OF MINOAN FABRIC.



FIG. 348. SARDONYX BEAD-SEAL FROM VAPHEIO TOMB: LONG ROBED MINOAN PRIEST KING IN CHARIOT HOLDING SPEAR.

Warrior Prince in Chariot on Vapheio Seal-stone.

He is here depicted driving a two-horse chariot of a kind that must itself be regarded as ultimately derived from the same Oriental quarter¹, and holding the shaft of a long lance, the middle of which rests on his shoulder. In spite of the relative smallness of the figure, it will be seen that he wears the same long robe with its alternate diagonal folds as the other representations of this class.

Happily, the date of the Vapheio interment—thanks to comparative evidence from the Cretan side—can now be securely established within close approximate limits. It is marked by a set of four painted goblets² belonging to the fine early phase of L. M. I b, exhibiting the 'Ogival Canopy' in the form equally shared by Minoan Crete and its Mainland plantations. These might, indeed, have been by the same hand as the similar motive on a jug from Palaikastro.³ A fragment with the same design was found on the Palace site at Knossos. Like the axe-head and the objects in precious metals, the painted clay cups were placed in the grave cist itself, but a beautiful contemporary 'amphora' in the best

Vapheio
gem with
warrior
prince in
chariot.

Approximate
date.

¹ See § 114 below.

² R. C. Bosanquet, *B.S.A.*, ix (1902-3),

³ *Eph. 'Ap'x.*, 1889, Pl. VII, 19, and p. 154; see *P. of M.*, ii, Pt. II, pp. 489, 490, Fig. 296 A, b.

pp. 284-6, and Fig. 5. See, too, *P. of M.*, *loc. cit.*, Fig. 296 A, a.

'marine' style—of typically Cretan evolution and certainly of contemporary work—which was subsequently reconstituted from fragments,¹ must have stood on the floor of the chamber.

The ceramic associations of the Vapheio interment, as illustrated by the painted clay goblets and the splendid 'marine' style amphora, thus point to the first quarter of the Fifteenth Century before our era. The chariot itself is of the earlier class, without the bowed appendage behind² that is universal on the Knossian tablets with the linear Script B, belonging to the last Palatial epoch (L. M. II).

Reference has already been made to the remarkable fact that, though, by now, seven different specimens of seal-stones have come to light presenting long-robed personages of the class above described, their provenance is confined to the Palace Site of Knossos or its neighbourhood, and to the Vapheio Tomb. To these, indeed, may be probably added a lentoid gem from a chamber tomb of Mycenae on which a figure, with a long robe less clearly defined, seems to be performing the function of a *haruspex* on the body of a fat boar, set on a table.³

At Knossos we have seen that the long-robed ceremonial garb is, so to speak, at home, and was shared by the figures of the 'Camp-Stool Frescoes', *ex hypothesi* belonging to some kind of Sacral College connected with the 'North-West Sanctuary Hall'. In the case of those from the Vapheio Tomb, like the axe found with them, they must in all probability be regarded as the *peculium* of some local vicegerent of the Knossian Priest-kings, ruling in a Mainland region that stood—as Argos and perhaps Mycenae seem to have done at a somewhat later date—in a close political connexion with the great Cretan centre.

If, as the ceramic evidence shows, the actual interment of the prince for whom this great monument was erected took place at a date but little later than 1500 B.C., the earlier part of his career might go back well within the limits of the mature phase of L. M. I a, which corresponds with the stage of thoroughgoing Minoan occupation on the Mainland side.

It was, in truth, a royal tomb, and nothing, certainly, among the gold hoards of Mycenae itself, can vie as an artistic composition with the two gold cups presenting repoussée groups of bull-catching scenes standing—as demonstrated in the preceding Volume of this work—in an intimate relation

Intimate
relation
with
Knossos
of
princely
owner of
Vapheio
seals.

¹ Bosanquet, *Some Late Minoan Vases found in Greece*, *J. H. S.*, xxiv (1904), pp. 318-20, and Pl. XI.

² See my observations on the Thisbê head-

seal, *Ring of Nestor*, &c., p. 31 seqq.

³ See below, p. 573 and Fig. 550. Tsountas, *Εφ. Ἀρχ.* 1888, p. 179 (No. 36), describes the figure as a woman sacrificing.

to the splendid painted reliefs that adorned the Northern Entrance porticoes of the Knossian Palace.¹

We must naturally suppose that the seat of government of the royal personage here interred was some Minoan predecessor of the neighbouring Sparta. The 'Mycenaean' representative of the town is known to have been situated on the hill of Therapna, where was the monument of Menelaos, traditionally, through his mother, a great-grandson of 'Minos II'. But the remains of this, recently explored, have proved to go no farther back than the latest 'Mycenaean' Age, posterior by some two centuries to the Vapheio Tomb. On the other hand, Hyakinthos of the Amyklæ Shrine, which lay nearer to the Tomb, bears a name of a recognized old Cretan and Carian class,² and his later association with Apollo may well reflect the earlier relationship of the Minoan Divine Child to the Mother Goddess.³

Pre-Hellenic Priest-kings of Spartan region.

¹ See *P. of M.*, iii, § 75, p. 158 seqq., and especially pp. 176-89.

² P. Kretschmer, *Einführung in die Geschichte der griechischen Sprache*, p. 404; A. Fick, *Vorgriechische Ortsnamen*, pp. 58, 113, 141.

Hyakinthides occur in Attica and Hyakinthos appears as a place-name in Tenos. Fick regards the name as 'Lelegian'.

³ See *P. of M.*, iii, p. 454 seqq.



FIG. 348 A. SYRO-HITTITE CYLINDER FROM ALEPPO DISTRICT, SHOWING HITTITE PRINCE BEFORE TABLE OF OFFERINGS, ABOVE WHICH IS A DOVE WITH STAR IN FRONT AND, BEHIND, THE SEATED GODDESS.

§ 102. DISCOVERY IN THE 'INITIATORY AREA' OF LAPIS-LAZULI CYLINDER WITH EARLY CHALDAEAN CONNEXIONS: THE 'NUDE GODDESS' ON CYPRO-MINOAN CYLINDER FROM KNOSSOS DISTRICT.

Syrianizing influences via Cyprus and Cilicia; Syro-Hittite Cylinders; Earlier traces of Oriental influence from Chaldaean side; Go back to Sumerian Age; Lapis-lazuli Cylinder from Palace site—its early characteristics; Cypro-Minoan Cylinders—example from Knossos district; The 'Naked Goddess' on Cylinders—derived from primitive 'Idols'; The Mother Goddess.

Syrianizing influences via Cyprus and Cilicia.

THE Syrianizing religious costumes described in the two preceding Sections, where they find such a full illustration in the 'Camp Stool Frescoes' and in the long robed priestly and royal personages of the seal-stones, are to be largely accounted for by the Minoan plantations in Cyprus and on the opposite Coastlands. The hold thus gained on the spacious North-Eastern angle of the Mediterranean finds its sequel in the new importance of the men of Kestiu in Egyptian monumental records from the closing decades of the Sixteenth Century B.C. onwards. Its reflection is also seen in the intrusion of various Cypriote and Syrian objects into Crete at this epoch.

The Syro-Egyptian alabaster vase in the form of a pregnant woman found in the harbour town of Knossos, already described, is a good instance of this.¹ A certain interaction, moreover, is now perceptible between the seal-types of Late Minoan Crete and glyptic and sphragistic works of the other group. A special intimacy in the relations with the lands East of the Mediterranean, such as is already noteworthy at the very beginning of the Age of Palaces, now once more makes itself felt to an exceptional degree.

Syro-Hittite Cylinders.

Just as in the days of Hammurabi, we have evidence of the importation into the Island of Babylonian cylinders, so again at this epoch more than one example belonging to the 'Syro-Hittite' class has been brought to light within Crete itself and in Mainland Greece. A specimen of considerable comparative value from the Knossos district is here given below in Fig. 351.

Earlier traces of Oriental influence from Chaldaean side.

But this invasion of Oriental forms was itself only a repetition, after successive intervals of time, of a reaction that had already affected the insular culture from a very remote epoch. Its first evidences, indeed, go well beyond the Age of Hammurabi, and it has been already shown that such objects as the ceremonial axe-head of Mallia in the form of the fore-part

¹ *P. of M.*, ii, Pt. I, p. 255 seqq., and Fig. 150.

of a pard, the 'rhytons' in the shape of bulls and bulls' heads with their trefoil or quatrefoil inlays, must be ultimately derived from old Sumerian sources. Among the finds described in the present Volume, a remarkable

Go back to Sumerian Age.



FIG. 349. LAPIS-LAZULI CYLINDER, WITH GOLD CAP-PIEC. (3.)

addition to this series has offered itself in the painted terra-cotta flower so closely recalling the 'flower-cones' from Ur, dating back to the Twenty-ninth Century before our era.¹ The tradition, indeed, of the contemporary floral jewellery such as is seen on that Sumerian site may well be recognized in the exquisite gold work from the Early Minoan tombs at Mochlos.

The comparative knowledge that we now possess of the earlier Chaldaean culture has made it also possible to trace the true connexions of a gold mounted cylinder of lapis lazuli obtained from the North-West part of the Palace site in the early days of the Excavation,² but of which no full account or illustration has as yet been published.

Lapis-lazuli Cylinder from Palace Site: its early characteristics.

Gold-mounted Lapis-Lazuli Cylinder.

This remarkable cylinder was found, 40 centimetres deeper than the M. M. III *a* stratum, in the 'Initiatory Area' just beyond the Western border of the 'North Lustral Basin' and is shown, enlarged to two diameters, in Fig. 349. It is set with a gold cap above and below, that above surmounted with a granulated circle.

A development of the engraved designs (three diameters) is given in Fig. 350.³ In the centre is the Man-bull Eabani, apparently seizing an ibex by the horn, with a post-like emblem between. Right and left of this central episode are pairs of the crossed rampant beasts inherent in this cylinder style,⁴ in the one case a lion and bull, in the other a lion and ibex. Outside this animal group stands the flounced figure of a Goddess.

Traditional Sumerian types on Cylinder.

In the narrower upper register of the cylinder, from right to left, after a spray and a small human head, appears the winged dragon of Marduk—

¹ See above pp. 124, 125, and Figs. 94, 95.

² *Knossos, Report*, 1900, pp. 67, 68. I there observed that the style of the mythological designs in the lower register 'shows no trace of distinctively "Hitite" or Syro-Cappadocian elements'.

³ Drawn by Monsieur E. Gilliéron, père.

⁴ Where a design is continuous, as on a cylinder, such overlapping figures are valuable to the engraver as supplying an element of elasticity in a composition, which, while having neither beginning or end, has to be contained within its circuit.

the old Tiamat, with its lion's head and horned projection. Left of this is the solar symbol of Shamash, then the dragon's head in profile, a lion's mask, a winged Sphinx and what seems to be a misunderstood version of the eagle



FIG. 350. EARLY CYLINDER OF LAPIS-LAZULI: DEVELOPMENT OF DESIGNS.

with spread wings of Sumerian tradition here given a human leg. Beyond this rises an upright animal figure.

The prominence here of the lower zone, the broad treatment of its designs and their old traditional character, give this cylinder a very early appearance. This impression, moreover, is confirmed by the lapis-lazuli material, which becomes already rare by the time of the First Babylonian Empire.

In the opinion of those most versed in the history of early Mesopotamian Art this cylinder, while fitting on to the 'Syro-Hittite' class, shows certain early traditions that go back to the days of Sargon of Akkad and belong to an epoch somewhat earlier than the Age of Hammurabi. Mr. Sidney Smith, of the Egyptian and Oriental Department of the British Museum, points out that the transverse band that descends from the shoulder of the Goddess in the lower register in fact answers to a feature of everyday costume exemplified by many Sumerian monuments, and here surviving in a divine association. So, too, the curves repeated in the space to the left of it, about the Goddess's shoulder, equally answer to the series of necklaces worn by Sumerian women.

If we accept Kugler's chronology based on the astronomic evidence,

which fixes the accession of Hammurabi as c. 2123 B.C.,¹ this would carry back the making of this cylinder to a date approaching 2400 B.C. Its condition is somewhat worn, and it may therefore have reached Crete at a slightly later date, but the probability nevertheless remains that the stratum from which it had been derived goes back at least to the Twenty-fourth Century B.C. It has already been noted² that the Minoan bull 'rhytons', like the early clay tablets, eventually derive from Sumerian models of the days of Sargon of Akkad, who had subdued the Amurru of 'the Western Land' and who seems to have extended his authority to the Mediterranean shores as early as 2650 B.C.

Its approximate date.

Cypro-Minoan Cylinder from Knossos District.

To a quite different category, connected with the 'Syro-Hittite' group referred to above, belongs the haematite cylinder, Fig. 351, found at Astrakous in the Pedeadia district, East of Knossos. Its discovery is itself a proof that works in this style were actually in the hands of the Minoan Cretans in the last Age of the Palace. It seems, indeed, to be best described as 'Cypro-Minoan'.

Cypro-Minoan Cylinder.

Here the mixed elements of this branch of Art are well illustrated. In the crossed, rampant lions and the ibex held up by the legs we still recognize a persistent Chaldaean tradition, while the open hand and forearm belongs to the 'Syro-Hittite' repertory.³ The winged disk—also often seen in that series—is an Egyptian intrusion.

The chariots, on the other hand, with the bowed appendage behind correspond with the type that first appears on the tablets of Class B in Knossos, belonging to the last Palace Period (L. M. II). That with the horse is led and followed by men in Minoan loin-clothing. These have nothing Oriental in their appearance, though the personage who holds up the ibex wears a gaberline and waist-belt like the votaries described in Section 101. It is also to be observed that the horse of the chariot beneath the forearm has the characteristic knotted mane of those of the late Palace 'Chariot Tablets'. This is an amplification of the plumes

¹ See *P. of M.*, i, p. 198, and cf. ii, pp. 264, 265. (This dating is that of Kugler, *Sternkunde und Sterndienst in Babel*, ii. Theil, 1. Heft.)

² *P. of M.*, ii, p. 264 (cf. L. W. King, *History of Sumer and Akkad*, p. 232 seqq.

King shows (p. 346 seqq.) that the supposed archaeological evidence of Sargon's having conquered Cyprus has no real basis).

³ E.g. G. Contenau, *La Glyptique syro-hittite*, Pl. XVII, 129.

seen on Ramesside chariot-horses, and it is taken over on the L. M. III 'amphoras' of Rhodes and Cyprus.

The appearance in the other register of the cylinder of a second chariot in which the horse is replaced by a Griffin brings us back to the



FIG. 351. CYLINDER OF CYPRO-MINOAN STYLE FROM ASTRAKOUS, EAST OF KNOSSOS.

same field of comparisons. Griffins at times take the place of horses on the chariot types of Cypro-Minoan 'amphoras', and the same alternation is illustrated in Crete at a somewhat earlier date by the end panels of the Hagia Triada Sarcophagus, a work that on many grounds it would be unsafe to bring down later than the close of the Second Late Minoan Period.

The Naked Goddess.

The religious interest of the composition centres in the figure of the Goddess—nude except for her loin-clothing—between two lion guardians, antithetically placed in upright positions with their forelegs lowered. This figure is the slightly modified equivalent of the 'Naked Goddess'¹ as seen on cylinders of the First Babylonian Dynasty. On these, moreover, it is

¹ On the 'Naked Goddess', see J. Menant, *Glyptique Orientale* (1883), i, p. 170 seqq., who compares Late Babylonian clay figurines; M. V. Nikolsky, *Arch. Congress of Moscow*, 1890; *Rev. Arch.*, 1892, ii, p. 36 seqq., *La Déesse des Cylindres et des Statuettes babyloniennes*; Hayes-Ward, *Cylinder Seals of Western Asia*, 1919, p. 161 seqq.; and especially G. Contenau (1914), *La Déesse nue babylonienne*; cf., too, his Thesis, *La Glyptique syro-hittite* (1922), p. 40 seqq., p. 105, &c.

loniennes; Hayes-Ward, *Cylinder Seals of Western Asia*, 1919, p. 161 seqq.; and especially G. Contenau (1914), *La Déesse nue babylonienne*; cf., too, his Thesis, *La Glyptique syro-hittite* (1922), p. 40 seqq., p. 105, &c.

already connected with the Cult of the Dove. (See Fig. 353 at end of Section.) With its two side-locks—which are in fact a Hathoric reminiscence—it most resembles a form belonging to the 'Syro-Hittite' class found in Cyprus.

The 'Naked Goddess' in its Relation to the Primitive Aegean and Anatolian Idols.

The history of this type helps to strengthen the presumption, already advanced with reference to the cult of the Sacred Dove, that there had been a reaction on early Semitic Religion of elements belonging to a primitive stock that may be traced through Western Asia to the further Aegean shores. It affords, indeed, a sidelight on the process by which the later Semitic profile took its Armenoid shape.

On Babylonian cylinders of Hammurabi's time this idol-like figure makes its sudden appearance 'crude and nude', unexplained by any earlier model of Chaldaean inheritance, and there is a strong presumption that it was taken over through contact with the Amurru of the 'Western Land'. It stands apart from the sacred scenes amidst which it is often introduced on a much inferior scale—rising like a separate image on a small pedestal.

This effigy, vaguely identified with the consorts of Marduk and Adad, and afterwards lost in a general conception of Ishtar, has with great probability been traced back by M. Salomon Reinach¹ to a widespread family of small images of a naked female figure, executed both in clay and stone, which seem to have stood in some talismanic relation to the idea of motherhood, the characteristic physical signs of which are at times well marked.

These images were in fact anticipated by the stone and ivory figurines like those of Willersdorf or Brassempouy, belonging to an older World. They find a wide distribution in a continuous geographical area that extends from the Aegean basin and the Middle Danube, throughout Asia Minor and to the Caucasian regions, and finds an Eastern offshoot on the shores of the Caspian, and at Serrin on to the Middle Euphrates. Attention to this remarkable primitive group has already been called in the First Volume of this Work.²

In Crete the evolution of the stone figurines that play the principal part in this can be easily traced to clay prototypes of squatting female

¹ *Chroniques d'Orient*, II série (1919), p. 566 seqq. Dr. G. Contenau, in his monograph *La Déesse Nue de Babylone* (1910); confirms Reinach's conclusions.

² See *P. of M.*, i, p. 43 seqq., and p. 48, Fig. 13 (*Primitive Clay Images and their Stone Derivatives*).

Relation
to early
figurines
represent-
ing
Mother
Goddess.

images going back at least to the Middle Neolithic epoch and considerably anterior in date to the oldest known Oriental or Egyptian Dynasties. Flatter Sub-Neolithic forms are seen on Fig. 352, *a-c*, while the principal

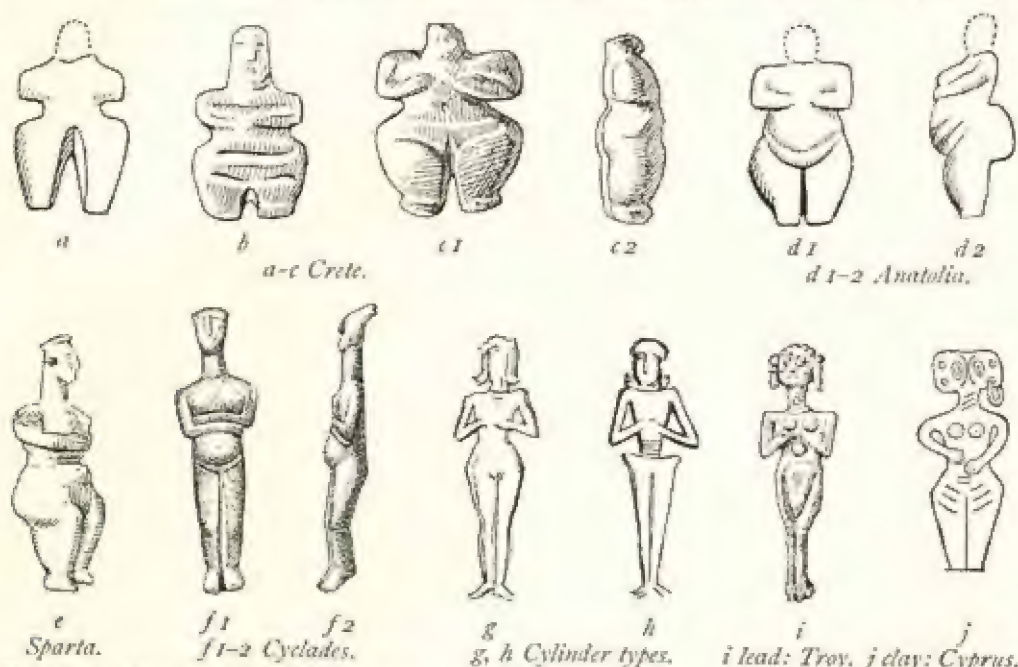


FIG. 352. COMPARATIVE TABLE ILLUSTRATING PRIMITIVE IMAGES OF THE MOTHER GODDESS AND THEIR INFLUENCE ON THE NUDE FIGURES ON CYLINDERS.

type thus evolved stands in relation to what may be regarded as the central line of descent for the Cylinder class.¹ (See Fig. 352 *g, h*.) Stone images from Ilatun Bunar, in the heart of the Hittite country West of Konia (*d 1, 2*),

¹ It must at the same time be recognized, as pointed out by me in *P. of M.*, i, p. 49, that certain types of early female images of this class have a very extensive Eastern range at an early date. Thus the parallel type with a rounded lower outline which occurs amongst the Neolithic clay forms of Knossos (*op. cit.*), recurs in stone in the Cyclades, the Troad, at Sykeon in Galatia and the Caucasus, and reappears S.E. of the Caspian, at Asterabad (with Sumerian spear-head of the early part of the Third Millennium B.C.). A variant of the same form, also of stone, was found in a contemporary deposit at Serrin on the Middle Euphrates, and a

similar image of clay was brought to light at Kish (Excav. of 1904: Ashmolean Museum) of the same epoch. Clay female figures of a fairly advanced sensuous type were found at Anau in Russian Turkestan, belonging to the Second Period of Elam. Crude clay female images also occurred in the 'pre-flood' stratum of Kish. Reference has already been made, *P. of M.*, i, p. 51 and note 2, to the clay female images found together with those of a male personage at Nippur, and dated c. 2500 B.C. (Hilprecht, *Excavations in Bible Lands*, p. 342 and Plate). On the other hand, the former theory that the nude figures of the cylinders refer to Ishtar's 'descent into

show that a parallel development had taken place on the Anatolian side and no doubt its clay antecedents in Neolithic deposits of that region may ultimately be also brought to light. It is characteristic of the evolution that the extreme steatopygy noteworthy in the clay Neolithic class finds its equivalent in a broadening of the thighs of the stone copies, which are square cut with an indentation above on either side, while the legs at the same time are gradually straightened out, as best seen in the prevalent Cycladic type, the figure at the same time becoming more elongated. It is specially interesting to observe that in the later specimens such as *e* from Sparta¹ and *f* from the Cyclades² the signs of pregnancy are well developed. We have before us a Mother Goddess.

Something of the traditional crudeness of the Neolithic clay figures is still preserved in the female image with chalk inlays found on the altar ledge of the very late 'Shrine of the Double Axes'³ at Knossos, where it occurred beside the sacred weapons and among votaries of the Dove Goddess. The gross indigenous clay images of the Cyprian Aphrodite themselves survive the period of Minoan settlement. At Knossos, on the other hand, the 'Ring of Minos' has supplied a nude personification in more artistic style⁴ executed, it would appear, in the First Late Minoan Period.

Hell', mother naked, as S. Reinach has well demonstrated, cannot hold. My own suggestion (*P. of M.*, i, p. 51) of a reference to this is hardly warranted. Conversely, however, the doffing of all raiment by Ishtar before entering the Underworld may have been due to traditional ideas as to the aspect of its

divinity.

¹ *Ath. Mith.*, xvi (1891), p. 52, Fig. 1.

² In the British Museum: recently acquired by Mr. E. J. Forsdyke.

³ *P. of M.*, i, p. 52, Fig. 14, *a* and *b*, and cf. *ibid.*, ii, Pt. I, p. 342 and n. 5.

⁴ See below, § 117, Pl. I.

Survival
of nude
type at
Knossos.



FIG. 353. LATE BABYLONIAN CYLINDER SHOWING OFFERING TO FIGURE OF THE 'NAKED GODDESS' ON A PEDESTAL WITH FAN-TAILED DOVE PERCHED BESIDE HER.

§ 103. THE MINOAN GENII AND THEIR RELATION TO THE EGYPTIAN HIPPOPOTAMUS GODDESS: THEIR BENEFICENT FUNCTIONS AND DIVINE MINISTRATIONS.

The Minoan Genii and their origin—Earlier Views—Milchhöfer, &c.; Winter's Comparison with Hippopotamus Goddess Ta-urt; Wear dorsal appendage, not skin of Victim; Impersonation of animal victims excluded; Predominance of lion's head type; Genii sprung from Ta-urt but transformed in Minoan sense; Characteristics and attributes of Hippopotamus Goddess—resemblances presented by the Minoan daemons; Astral relations of Ta-urt also reflected; Ta-urt = Ursa-Minor; Controls 'haunch' sign of Set (Ursa Major); Impersonation of Isis, Guardian of Horus; Astronomic Ceiling of Sen-mut Tomb; Early imported scarab with Ta-urt type from Mesarà tomb; First appearance of Minoan Genii; Examples on bronze hydrias from Kurion L.M. Ib; Suggestions of Crocodile between Genii; Correspondences with details of Egyptian astral scenes; The 'Daemon Seals' of Knossos; Genii as carriers and leaders of animals; Bull and cow led by horns—parallelism with Vapheio scenes; Genius leading lion; Talismanic class of bead-seals with libation vessels, of M. M. III-L. M. Ia date; Vegetation charms; Rain-bearing ritual on Seal types from Knossos and Thisbê; Ewer-holding Genii engaged in similar ritual; Confronted daemons on Vapheio gem, pouring libations into fountain basin before sacred palm—the fountain of Berenton; Genii pouring libations into tripod cauldrons on pillars and over altar-blocks and cairns; Ta-urt and Minoan Genius on Cylinder Seals, 'Syro-Hittite' and 'Cypro-Minoan'; Minoan Genii bear drink offerings to Goddess on Tiryns signet; Cylinder from Kakovatos with Genius guarding lion-slaying hero—Minoan Hêraklês; Analogy of Ta-urt assisting Horus against Ox of Set; Genii between lion guardians as representatives of divinity; Genii as Ministers to youthful God—Bead-seal of Spartan basalt from Kydonia.

The
Minoan
Genii.

THE sacramental scenes of which we have a record in the 'Camp-stool Frescoes' already described, where human votaries of both sexes are concerned, have already led to a comparison with parallel functions performed by the Minoan Genii, who play an important part in the religious iconography of the Late Minoan Age. Thus have we seen on the great signet-ring of the 'Tiryns Treasure'—here reproduced in its entirety in Fig. 385, a procession of four of these monsters bearing ewers from which to replenish the chalice in the hand of the seated Goddess, and itself identical in form with the gold cup held by one of the votaries of the Fresco.

To this representation we shall return.

Hippopotamus Goddess Ta-urt regarded as Source of Minoan Genii: Earlier Interpretations.

A good idea of this class of subject will be given by the photographic reproduction of the Chalcedony lentoid shown in Fig. 354¹ (see, too, Fig. 358, *b*), where the Minoan Genius, here with a hippopotamus-like head, is carrying a huge bull. The daemon has lion's feet.



FIG. 354. MINOAN GENIUS CARRYING BULL.

In the earliest archaeological notices of this class of subject, such as Milchhöfer's in 1883,² it was naturally approached in a backward direction along the tortuous paths of Greek mythology. A certain preference was shown for the horse-headed Demeter of Phigalia and for allied forms of Erinys and Harpy. The type of the daemon holding a high-spouted vase, especially, did not fail to suggest Iris as

sent by Zeus to fetch water from the Styx in a golden ewer of that form.³ The true key was first supplied by Winter,⁴ who pointed out that the real source of these monstrous shapes was to be found in the Egyptian Hippopotamus Goddess Ta-urt (Thueris), otherwise Reret—the nearest 'horse'-type being in fact the 'Nilpferd'.

Even then elaborate attempts were made to vindicate the Hellenic character of these strange creations. Furtwängler,⁵ indeed, ever resourceful, while admitting the resemblance of the whole figure to that of the Hippopotamus Goddess, ventured on the bold suggestion⁶ that Ta-urt, as depicted in Egyptian Art, represents the 'specialization' of a type borrowed from the Minoan daemons. Unfortunately, however, for this theory Ta-urt was known in Egypt at least four centuries before the Genii appear in Crete.

¹ See below, p. 433, n. 2 (from Cades' cast).

² A. Milchhöfer, *Anfänge der Kunst*, p. 54 seqq., and p. 80. Compare, too, Helbig, *Bull. dell'Inst.*, 1875, p. 41 seqq.; O. Rossbach, *Arch. Z.*, 1884, p. 173 seqq.; Overbeck, *Kunstmythologie*, iii. 683 seqq.; Tsountas, *Εφ. Ἀρχ.*, 1887, p. 162 seqq., and Pl. X, 1.

³ Hesiod, *Theog.*, 784 seqq.: ἢ χερσὶν προήει.

⁴ *Arch. Anzeiger*, 1890, p. 108.

⁵ *Antike Gemmen*, iii, p. 41: 'Gleichwohl ist eine Ähnlichkeit der gesamten Gestalt mit der ägyptischen Nilpferdgöttin Taueris

unverkennbar.'

⁶ *Loc. cit.*: 'Das umgekehrte ist viel leichter denkbar: die Taueris ist die von der ägyptischen Kunst gemachte Spezialisierung eines von aussen überlieferten Dämonentypus.' Professor Nilsson, who has collected much material relating to the Genii in his *Minoan and Mycenaean Religion*, while admitting (p. 323) a striking resemblance to the Hippopotamus Goddess in the case of the Phaestogram (Fig. 358, p. 435 below), yet finds the comparison 'far-fetched'.

Views of Milchhöfer and others. Winter's comparison with Ta-urt.

Dorsal
appen-
dages, not
skins of
sacrifice.

The exceptional impression produced by the daemons on the fragment of painted stucco from Mycenae, reproduced in Fig. 366 below, has been perhaps largely responsible for the comparison of these, so learnedly maintained by Professor A. B. Cook, with worshippers, clad, according to a widespread ritual practice, in the skins of their victims,¹ as, indeed, is frequently illustrated in Minoan Art.²

In no case do these Minoan worshippers wear animal masks on their heads. Such, however, occur in the mimetic dance on the ninth-century frieze of Assur-nazir-pal at Nineveh (Fig. 355)³ and this has been specially invoked for comparison with the Cretan figures.

But the comparison is quite unwarranted. These human-limbed performers at once declare themselves as of a different class from the Minoan demons with their animal legs.

Imper-
sonation
of animal
victims
ex-
cluded.

The skin of the animal, head and all, might well, indeed, be worn by votaries, such as those who took part in the goat dances in honour of Dionysos. Bulls and horses, asses, lions, and wild boars could have been impersonated in the same fashion. As applied to the origin of the Minoan Genii there is, however, one highly inconvenient circumstance attaching to such an explanation. The worshippers, it is true, might have concealed their heads and the upper part of their bodies in the skins of these various victims. But they could hardly have grown claws or hoofs such as are visible in many of their Minoan representations, and they would have found difficulty in imitating the articulation of animals' legs.

Their hind-paws indeed distinguish them from the family of composite half-human beings so well known to Minoan Art, and to which the Minotaur himself, the 'man-stags', 'man-goats', and other monstrous shapes belong, all of these being provided with human legs. Neither was any attempt made to explain the peculiar character of their dorsal crests and appendages that derive so naturally from the crocodile skin with its plaited termination which is a special feature of the Egyptian Hippopotamus Goddess.



FIG. 355. MIMETIC DANCERS IN LIONS' SKINS: FRIEZE OF ASSUR-NAZIR-PAL.

¹ A. B. Cook, *Animal Worship in the Mycenaean Age* (*J. H. S.*, xiv (1894), p. 81 seqq.). See too, his *Zeus*, i, p. 702 seqq.

² See Nilsson, *op. cit.*, p. 134 seqq.

³ Layard, *Monuments of Nineveh*, I, Pl. 30, and cf. Cook, *op. cit.*, pp. 115, 116.

The varied character of the animal physiognomies, in the case of these Genii—among which, however, the lion greatly predominates—has itself no real significance. The 'Nile horse'—known to the Ancient Egyptians themselves as the Nile 'pig'—being unknown to the Minoan artists, was naturally identified in different ways with creatures familiar to them.

Predominance of lion's head type.

Genii still to be regarded as mainly Minoan Creations.

This is not to say that the Genii as seen in the early Cretan seals are otherwise than truly remarkable creations of the Insular Art. Formal and functional traces of their Egyptian prototype no doubt exist, but they were themselves only taken over to be transformed for the uses of Minoan popular religion. The animal element in the Genii is now predominantly leonine; indeed, on an important series of seal impressions from the Knossian Palace, one of them is accompanied by a man-lion. So, too, the beneficent function that they are mainly seen performing, the protection of vegetation, does not seem to have been a special attribute of Ta-urt. Rain-bringing rites themselves have no relation to the climatic conditions of the Nile Valley. On the other hand, the parallel that naturally presents itself of the winged Assyrian Genii fertilizing the female palm-tree,¹ relates to a period some three centuries later than the time when the Minoan Genii were in vogue in Crete. Neither is there any relationship in their form.

Genii sprung from Ta-urt but transformed in a Minoan sense.

Characteristics of Hippopotamus Goddess.

The Hippopotamus Goddess is portrayed with the body and arms of a woman, and the head and legs of a hippopotamus, and, as already mentioned, wears a dorsal appendage apparently representing the skin of a crocodile, with which animal she was so nearly connected in cult (Fig. 356, *a*, *b*). According to certain religious systems the Hippopotamus Goddess was the female counterpart of Set and the mother of the Sun God whom she brought into the world at Ombos,² for which reason the house of his nativity was shown in that city. The Goddess forms part of a triad, including Nekhebet or Eileithyia, the Goddess of Child-birth, and is generally depicted as in an advanced state of pregnancy. It is rather as a help in child-birth that she first appears in Egyptian religious Art, about the time of the Twelfth Dynasty.

Characteristics of Hippopotamus Goddess

Her attributes.

As can be seen from Fig. 356, *a*, *b*, the hippopotamus head of Ta-urt is generally assimilated to that of the crocodile, so often carried on her

¹ E. B. Tylor, *The Winged Figures of the Assyrian and other Ancient Monuments* (Proc. Soc. Bibl. Arch., 1890).

² Budge, *Gods of the Egyptians*, ii, 359.

Resem-
blances
pre-
sented by
the
Minoan
daemons.

back. Fig. 357, however, from the Ramesseum at Thebès¹—where she is shown in an astral relation, of which more will be said below—gives a fairly good impression of the original type. In its main features it is practically identical with the earlier design from the Sen-mut Tomb shown in Fig. 362 below. The figure here with the mane rising in front of the head and the tongue protruding, and the pregnant outline of the body, shows points of resemblance with that of more than one Minoan Genius.

There can be no question, for instance, of the general correspondence with the design of the kid-holding daemon on the cornelian bead-seal from a Phaestos tomb,² Fig. 358, *a*, though in that case the upper corner is fractured. The pot-bellied outline and the pose of the legs with their feet, in this case clearly clawed, is practically identical. That one design is closely related to the other it is impossible to doubt. The conformity even extends to the carrying of a young animal—in one case a crocodile, in the other a kid. The direct

¹ H. Brugsch, *Thesaurus Inscriptionum Aegyptiacarum*, Pt. I, p. 124, Fig. 2: the Hippopotamus Goddess (2) holding up a small crocodile and grasping a sword-like instrument (11), to left of which are the rings of the chain by which (5) the forepart of the bull

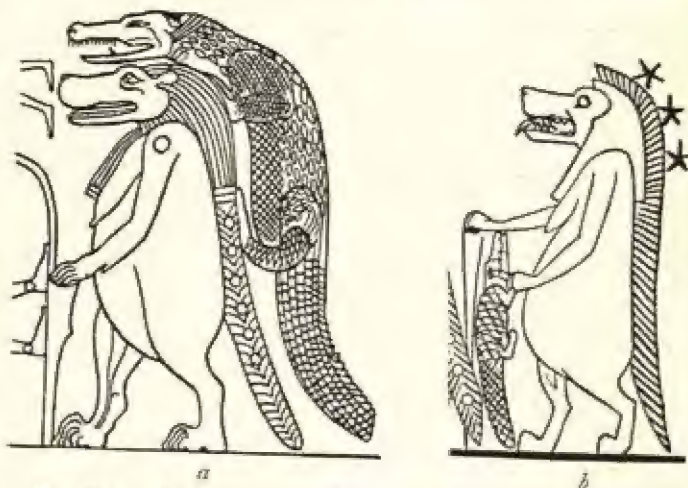


FIG. 356. HIPPOPOTAMUS GODDESS, TA-URT; *a*, BEARING CROCODILE ON BACK; *b*, CARRYING IT IN HAND.



FIG. 357. HIPPOPOTAMUS GUARDING 'HAUNCH' SIGN; RAMESSEUM.

sign (*Maskheti*) is attached. Horus (4) to left aims a spear at this. To right is a 'Scorpion' Goddess (*Salget*).

² Savignoni, *Mon. Ant.* xiv (1904), p. 625, Fig. 97 *a*.

indebtedness of the Minoan design indeed might have been still more striking had the back of the head and the crest been preserved. The stone itself, of the form described as the flattened cylinder, is interesting as an indication of a relatively early date, since the vogue of this type belongs rather to the last Middle Minoan Period and the succeeding transitional phase that covers L. M. Ia.¹



FIG. 358, a. CORNELIAN
BEAD-SEAL, PHAESTOS.



FIG. 358, b. CHALCEDONY
LENTOID.

On the chalcedony lentoid again (Fig. 358, b)² the conformation of the head and snout of the Minoan daemon betrays a distinct

resemblance to that of the hippopotamus (cf. Fig. 354). Here, too, we recognize the swollen belly, while a bull is borne on the shoulders in place of the crocodile carried on her back by Ta-urt in Fig. 358, a.

Parallelism between Genii and Ta-urt extends to her Astral Relations.

My own belief, expressed many years since,³ that these daemon types were essentially rooted in that of the Hippopotamus Goddess, has only been strengthened by the materials since accumulated, and the suspicion voiced in my monograph on the Tree and Pillar Cult of a surviving

Was
Astral
relation
of Ta-urt
also re-
flected?

¹ The tomb in which the intaglio was found at Phaestos belongs to a series dated somewhat later (from the lower borders of L. M. II to L. M. III b), but the fractured state of the stone allows for the possibility of its having been somewhat of an heirloom. On the other side of the gem is a bull-grappling scene of an abnormal kind (*op. cit.*, p. 626, Fig. 97, b). A male figure is seen half kneeling, clad in a kilt with the ends of two cords hanging down from its girth. This method of cording round recalls that of the skirt of a female figure on a M. M. II signet (*P. of M.*, II, Pt. I, p. 33, Fig. 15).

² From an impression taken in Rome by Cades (*Impressions*, 54, No. 75). Lajard, *Culte de Mithra*, Pl. XI.III. 19; Milchhöfer, *Ans. d. Kunst*, pp. 54, 55, Fig. 44, c. The animal is clearly a bull, not as Cook suggests (*Animal Worship*, &c.: *J. H. S.*, xiv, p. 84), a Cretan goat.

³ A. E., *Mye, Tree and Pillar Cult*, p. 71; *J. H. S.*, xxi (1901), p. 169. The astral character of the Goddess 'as the image of a Constellation standing in connexion with the "Haunch", our Charles's Wain', and its parallelism with 'the solar lions, Griffins, Sphinxes, and Krio-sphinxes' was there insisted on.

astral element in the Minoan Genii has received—as shown below—some suggestive illustration.¹ It will be seen, indeed, that we have to deal,

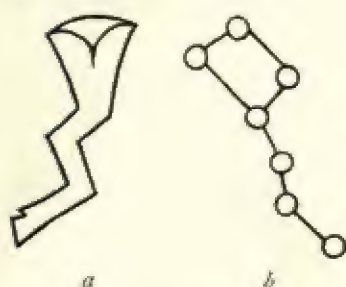


FIG. 359. *a*, 'OX-LEG' SIGN; *b*, 'GREAT BEAR' CONSTELLATION.

not only with formal correspondences in the dorsal appendage and the crest above the forehead, the actual resemblance of the head occasionally presented, and even the pot-bellied outline, but with certain functional aspects such as the holding up or carrying of animals in the same way as the crocodile on the back or in the hand of Ta-urt, of which, indeed, we seem to have an actual reminiscence.² Over and above this, moreover, the divine relationship in which these daemonic creations appear—especially as ministrants or guardians of a young

God—shows a real parallelism with that of the Egyptian Goddess as the protectress of her son, the young Sun God, Horus.

There are reasons for believing that the Hippopotamus Goddess was herself identified with the Polar sign of the Little Bear (*Ursa Minor*).³ It is therefore not surprising that later on in Egypt—as is illustrated in Fig. 361 above by the design from the Ramesseum—we find Ta-urt standing in a special relation to the constellation known to us as the 'Great Bear' or 'Charles's Wain'.

As a celestial sign the symbol for this had been the so-called Haunch, the fore-leg of an ox or calf, such as was habitually used from the early days of the Old Kingdom as a sacrificial offering,⁴ and thus supplied the hieroglyphic character, *khopsh*, which has the same form. That this sign should have acquired an astral significance becomes indeed patent to the eye when its outline as shown in Fig. 359, *a*, is compared with *b* depicting the stars of the 'Great Bear' constellation with linear connexions.⁵

The constellation that marks this dark quarter of the sky was the symbol of Set, who, probably from his association with the principal Hyksos

¹ See below, pp. 440, 441.

² See below, p. 456 and Fig. 381.

³ This view is favourably regarded by the latest authority on early Astronomy, Ernst Zinner (*Geschichte der Sternkunde*, 1931, p. 22). The crocodile on her back apparently represents the stars γ and ϵ of *Draco*.

⁴ It is thus seen, for instance, cut and carried as a joint of offering, on a Vth

Dynasty Tomb (F. Ll. Griffith, *Mastaba of Ptahhetep and Akhetep*, Pt. I, Pl. IX, No. 140).

⁵ The relative position of stars of this constellation as here given is based on A. Pogo's sketch of the circumpolar constellations, North horizon of Thebes c. 2000 B.C. in his article on the Astronomic Ceiling of Sen-mut, in *Jds*, Oct. 1930. (Cf., too, *Chronique d'Égypte*, Jan. 1931, p. 43, Fig. 4.)

Ta-urt
identified
with
*Ursa
Minor*.

Con-
nected
with
'haunch'
sign of
Set;
*Ursa
Major*.

deity, acquired later a more malignant character. Under the New Kingdom

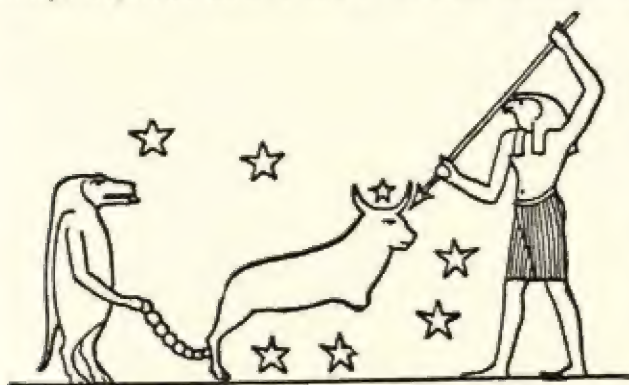


FIG. 360. THE OX SIGN OF SET, CHAINED BY TA-URT AND SPEARED BY HORUS.

it thus became a chief function of the Hippopotamus Goddess to keep watch and ward over this sinister element and to make clear a place in the heavens for the birth of Horus as the Spring Sun. She was, in fact, an impersonation of Isis, and it is expressly said that 'it is the office of Isis' (or Hathor) in the shape of a hippopotamus (*em reret*) to

Ta-urt impersonation of Isis, guardian of Horus.

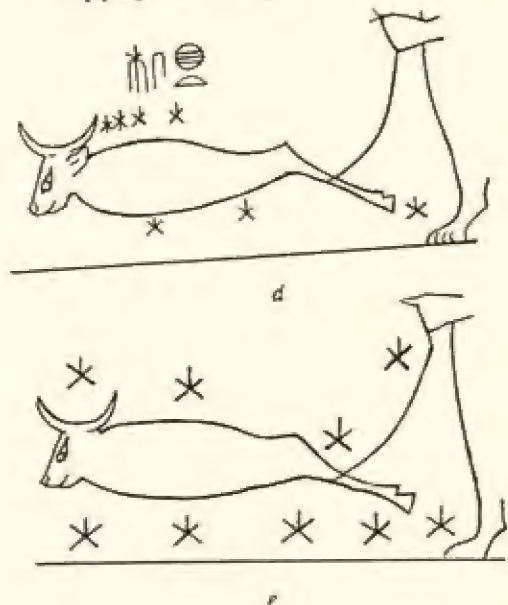
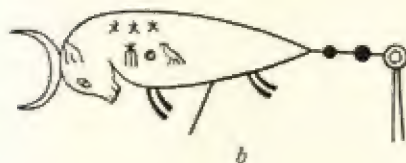
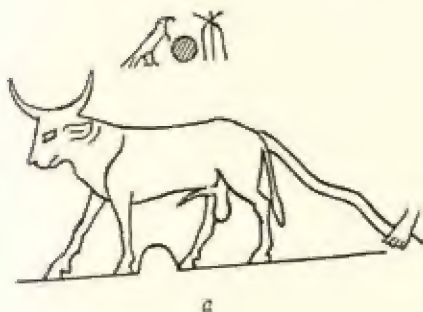


FIG. 361. THE 'BULL' AND 'OX-HAUNCH' SIGN OF SET (= 'Great Bear') AS CHAINED BY THE HIPPOPOTAMUS GODDESS TA-URT: *a*, RAMESSEUM, THEBES; *b*, CEILING OF TOMB OF SENMUT; *c*, XXTH DYNASTY; *d*, PTOLEMAIC; *e*, XXTH DYNASTY, PHILAE.

guard the bronze chain in the 'Northern Sky,'¹ where is the fore-leg (*khopsh*) of Set'. In scenes like that of Fig. 360 she holds enchained this impersonation of the evil God, while Horus aims his spear at it.


¹ *Book of the Dead*, xvii, 25. Cf. Brugsch, *Thesaurus Inscriptionum Aegyptiacarum*, i, p. 121 seqq. *Die Sternbilder am nördlichen Himmel*.

Astronomical
ceiling
scenes.

From a comparatively early date in the New Kingdom the Hippopotamus Goddess thus appears in a series of astronomic scenes appropriate



FIG. 362. CEILING OF INNER CHAMBER OF SENMUT TOMB SHOWING HIPPOPOTAMUS GODDESS AS GUARDIAN OF THE 'OX-LEG' CONSTELLATION.

to ceilings, holding by a chain, or at least controlling, the 'ox-leg' sign of Set, now, from its hostile association, often inscribed as *Mshtyw*,  'the Club, the Striker'. The alternative name *khopsh*, also applied to the familiar Egyptian scimitar, is due to its resemblance in form to the 'ox-leg' sign.

Horus is seen aiming his spear at it in Fig. 362. Often the sign is bordered by the seven polar stars. The fuller representation of the constellation as the whole animal certainly suggests a comparison with the seven 'ploughing oxen'—*septentriones*—of Roman astral lore.

Versions of these scenes are given in Figs. 360–62 since they illustrate the most prominent function of the Hippopotamus Goddess during the period when she influenced the rise of the Minoan Genii with which we are here concerned. The possible reaction of elements from this cycle must therefore always be borne in mind.



FIG. 363. SCARAB FROM PLATANOS SHOWING FIGURE OF TA-URT.

Keftiu tributaries and their offerings on the walls of this tomb supply, as has been already shown,¹ the first illustration of the intimate connexion at this epoch between Crete and Egypt. The ceiling of this room presents an elaborate astronomical scene of this kind in which the Hippopotamus Goddess plays the principal part (Fig. 362). She is there depicted as if controlling the principal polar star by means of a pulley. She holds a knife and small crocodile in her hands, as usual, and another crocodile is on her back. Often a jar is set in front of her.

That the figure of the Goddess was known to Crete by the beginning of the Middle Minoan Age is apparent from the already recorded discovery of a white steatite scarab depicting her in the smaller tholos at Platanos, Fig. 363,² the main contents of which were M. M. I, and which included a Chaldaean cylinder of the time of Hammurabi. The Goddess in this case has her hand raised in the act of adoration, and in front of her is part of the loop of an *ankh* or life sign, with which she was also associated.³

It is not, however, till the early part of the 'New Era' that we find

Scene on ceiling of Sen-mut Tomb.

Early imported scarab with Ta-urt type.

¹ See especially, Vol. ii, Pt. II, p. 737 seqq.

² Xanthudides, *Vaulted Tombs of Mesara*, Pl. XIV, No. 1075, and p. 117. When first published by me, *P. of M.*, i, p. 200, Fig. 148, I accepted the view taken by Dr. H. R. Hall that the scarab was a Minoan imitation. But

his maturer judgement pronounced it—no doubt correctly—as of Egyptian fabric. (See his observations on *The Civilization of Greece in the Bronze Age*, 1927, p. 69, note 1.)

³ The sketchy animal figure behind may represent, as Hall suggests, *loc. cit.*, a monkey.

First
appear-
ance of
Minoan
Genii

Often
asso-
ciated
with
'anti-
thetic'
scheme.

actual evidence of the reaction of this type on Minoan Art. The large deposits of seal impressions from Zakro and Hagia Triada as well as that from the 'Temple Repositories' at Knossos, dating from the close of the Middle Minoan Age and the succeeding transitional epoch, contain no example. What seems to be the earliest instance—on the 'Flattened Cylinder', Fig. 358 *a* above—may come within the limits of L. M. I *a*. On the other hand, when they become frequent, these reminiscences of the Hippopotamus Goddess are repeatedly associated with the 'antithetic' scheme of opposed monsters or guardian animals—generally on either side of a central object such as a column, altar-block, or sacred tree—that first becomes common about the mature L. M. I epoch.¹ It is very characteristic of L. M. I *b*, where it is of frequent appearance. Thus the representative example of this class, Fig. 378 below—on a gem already cited for the parallel it supplies to a chalice of the 'Camp-stool Frescoes'²—was found in the Vapheio Tomb, the last ceramic remains of which are, as we have seen, in the L. M. I *b* style. With it was an 'amygdaloid' seal-stone exhibiting a single Genius, a replica of one of the pair displayed on the other. It will be seen that the remarkable illustrations of these Minoan daemons on an imported bronze '*hydria*' found at Kurion in Cyprus, described below—together with another vessel of the same form³—also belong to the closing First Late Minoan phase (L. M. I *b*).

Indications of Influence of Astral Relations of Ta-urt on those of Minoan Genii in the 'Daemon Seals' of the Palace Hoard.

Corre-
spond-
ences
with
details of
astral
scenes.

In the astronomical scenes in which the Hippopotamus Goddess takes part on Egyptian ceilings such as that of the Tomb of Sen-mut, several features appear which may well be regarded as having a special relation to the representations of Minoan Genii. As bearing on this relationship it is to be noted that the 'ox-leg' which Ta-urt controls with a chain at times takes the form of a whole figure of a bull. So, too, both the bovine shape and the divine Hippopotamus itself—especially in later examples—are accompanied by stars.

On the bronze '*hydria*' from Kurion—more or less contemporary with the Sen-mut ceiling—the connexion of the daemons with bulls is doubly emphasized. They are seen coursing round the rim, and their heads are triply grouped beneath each handle in place of the marine subject on the other vessel. Bovine animals are led by the Genii on two of the finest intaglios presenting the subject, in one case by a short cord (see below,

¹ For the 'antithetic' scheme, see *P. of M.*, iii, pp. 515, 516.

² See above, p. 393, Fig. 329 *b*.

³ See p. 453 *seqq.*

Fig. 368, *b*). On a serpentine bead-seal from Crete (Fig. 364)¹ a Minoan daemon is portrayed between two stars, in this case carrying a stag.

The stars here are highly significant of the original astral connexion.

Equally suggestive is a feature of a seal-type repeated on a series of

eighteen clay im-
pressions² found
in a deposit at the
back of the 'Ser-
vice Stairs' in
the Domestic
Quarter, known
from them as
the 'Area of the
Daemon Seals',
and in fact form-
ing part of a
more extensive
deposit derived

Daemon
seals of
Knossos:
appear-
ance of
leg sign.



FIG. 364. CRETAN LENTOID SEAL SHOWING MINOAN GENIUS BETWEEN TWO STARS, CARRYING STAG.



FIG. 365. SEAL IMPRESSION SHOWING MINOAN GENIUS AND MAN-LION WITH ANIMALS' LEGS IN FRONT; 'AREA OF DAEMON SEALS'.

from the 'Room of the Archives' off the same staircase.

In the design of these, as shown in Fig. 365, we see a Minoan Genius with a composite monster, lion-headed but human-legged, before him. In the field in front of these appear two animals' hind-legs that might well be a reminiscence of the 'ox-leg' or *khopsh* sign of Set, so intimately connected with the astral functions of the Hippopotamus Goddess, though in that case it is the foreleg.

Genii as Carriers and Leaders of Animals.

Of the carrying function, common both to the prototype and to the derivative, the well-known fresco fragment from a private house at Mycenae³ supplies a good example (Fig. 366). On this, animals, with heads compared by their finder to those of asses, are seen bearing a pole with spiral band.⁴ The mane of the animals, whose heads certainly resemble

Genii as
carriers
and
leaders
of
animals:
Mycenae
fresco.

¹ Milchhöfer, *Anfänge*, &c., p. 55, Fig. 54, *c*; Furtwängler, *Berlin Mus. Cat.* (Geschnittene Steine, Pl. I, 12, and p. 3); *A. G.*, Pl. II, 35; Overbeck, *Gr. Kunstmythologie*, iii, p. 683, Fig. 3; A. B. Cook, *J. H. S.*, 1894, p. 138, Fig. 19.

² Many of these were found in a very

imperfect state. In another deposit a type is also represented with a Genius holding a ewer and with a kind of spray behind.

³ *Éph. 'ApX.*, 1887, Pl. X, 1.

⁴ It is rather, as Tsountas points out (*op. cit.*, p. 161), a pole with a spiral band round it than a rope as it has elsewhere been described.

those of asses, is prolonged in a shaggy appendage, with chevron decoration,¹ that conceals part of the girdle.² Tsountas' opinion that the pole was used for carrying certain objects is supported by the design on a cornelian bead-seal

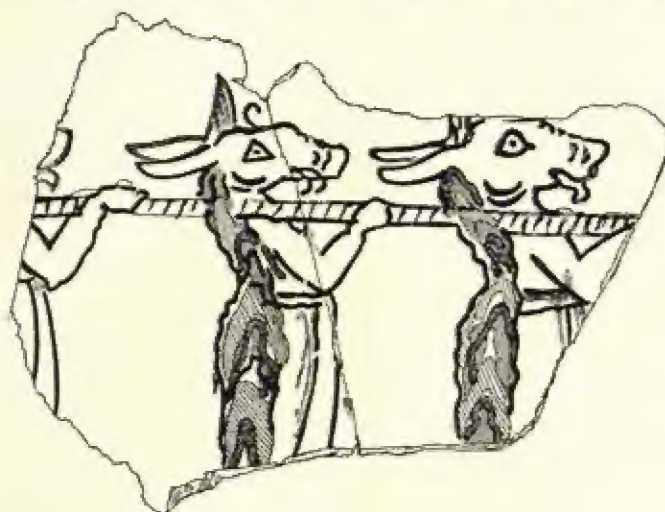


FIG. 366. DAEMONS WITH ASS-LIKE HEADS CARRYING POLE; ON FRESCO FRAGMENT FROM MYCENAE.

from Crete, Fig. 367, on which a daemon of this class is seen bearing in this manner two



FIG. 367. GENIUS ON CRETAN LENTOID BEAD-SEAL, CARRYING LIONS ON POLE.

lions—heroic trophies of the chase—their fore-parts hanging down.³

Elsewhere the Genii appear carrying animals on their shoulders. On the Cretan lentoid already illustrated in Fig. 364 a stag is thus borne. In other cases we see bulls.⁴ On the 'flattened cylinder', Fig. 358, *a*, above, the daemon holds a kid with his forelegs.

¹ This chevron type of ornament, originally taken over from the graining of cut stonework, is also frequent in metal-work.

² This procession of ass-headed Genii seems, as well as certain gem-types, to have suggested a connexion with the animal-headed figures on a shell relief from Phaistos (*Mon. Ant.*, xii, p. 129 seqq. and Pl. VIII, 1). But these, with their human limbs and long skirts, clearly derive from the Babylonian class illustrated by the well-known 'Hades' tablet and a similar one from Assur. (See especially della Seta, *La Conchiglia di Phaistos*, &c.; *Rendiconti della Acc. dei Lincei*, xvii, 1908, p. 409 seqq.; and Nilsson, *Minoan-Mycenaean Religion*, &c., pp. 320, 321.)

³ Cornelian lentoid, Crete. Milchhöfer, *Anfänge*, &c., pp. 54, 55, Fig. 44, *b*. Cf. Brunn, *Gr. Kunstgeschichte*, p. 41; Overbeck, *Gr. Kunstmythologie*, iii, 683, &c.; Cook, *Animal Worship*, &c., *J. H. S.*, xiv, 1894, p. 84, Fig. 2; P. et C., *Hist. de l'Art*, vi, p. 845, Fig. 428, 8; Berlin Mus. (Furtwängler, *Cat.*, No. 11).

⁴ See above, p. 435, Fig. 358, *b*. On a serpentine lentoid from Salonica a similar scene recurs. Milchhöfer, *Anf. d. K.*, pp. 54, 55, Fig. 44, *d*; Cook, *Animal Worship*, &c., *J. H. S.*, xiv (1894), p. 106, Fig. 9; Furtw., *Berlin Cat.*, No. 13. The design is very badly preserved, and Milchhöfer's illustration is misleading.

At times they are depicted as guiding or leading animals. On a lentoid bead-seal of Spartan basalt, Fig. 368, *a*, a daemon, with a head that combines something of the boar and lion and a bristling mane, guides a bull Bull and cow led by horns.



FIG. 368. *a*, MINOAN GENIUS LEADING BULL ON LENTOID BEAD-SEAL OF SPARTAN BASALT; *b*, SIMILAR SCENE WITH COW; ROPED BY HORNS, BANDED AGATE LENTOID, FOUND IN CRETE.

by his horns, while in front is what looks like the conventional head of a palm tree in a pendant position. This gem is the same as that published by Milchhöfer fifty years since in his *Anfänge der Kunst*¹ from one of Cades' casts (54, No. 76), made in Rome in 1831 and the following years. The original was included in the Mayer Collection, and was subsequently purchased by me.² By a curious coincidence a lentoid bead-seal of banded agate, which must be regarded as a companion piece, Fig. 368 *b*, executed, we may conclude, by the same engraver, was later acquired by me at Athens from its Greek possessor, who had obtained it in Crete, where he formerly resided. In this case, the animal is a cow—the udder being clearly discernible—and the daemon—here of the lion-headed type—leads the animal by means of a cord, which coils round the base of the horns.³

The bovine types on these two parallel seals themselves suggest an interesting observation. The bull of Fig. 368, *a*, with his raised head and

¹ P. 80, Fig. 51 (Leipzig, 1883). See, too, Cook, *op. cit.*, pp. 152, 153, Fig. 21.

² At the sale of a portion of the Mayer Collection in 1879. Cf. C. T. Gatty, *Cat. of the Engraved Gems and Rings in the Collection of Joseph Mayer, F.S.A.* (price £1). It is

described, p. 4, No. 10, as a 'group consisting of a bull, a dragon-like horse, and a coiled serpent, grotesquely executed. Early Greek work.'

³ For photographic reproductions of Figs. 368 *a*, *b*, see Suppl. Pl. LV, *a*, *b* below.

Parallel-
ism with
'Vapheio'
scenes.

protruding tongue, and with one hind-leg drawn back, is essentially of the same type as that of the Vapheio Cup B, belonging, as has been shown in detail in the Third Volume of this work¹, to the scene in which—lured into dalliance by a decoy cow—he is lassoed round one of his hind-legs by a Minoan cow-boy.²



FIG. 369. MINOAN GENIUS
LEADING LION; CORNELIAN
LENTOID, MELOS.

On the other hand, the upraised tail of the cow of Fig. 368 *b*, the udder of which is unmistakably indicated, reproduces the physical sign of sexual inclination already noted in the animal, engaged in amorous converse with the bull in the central scene of the same cup.³

The bold artistic style of the engraving of both these intaglios itself fits in well with the approximate date of the gold cups exhibiting these toreutic

masterpieces—approximately supplied by the fine L. M. I *b* pottery found with them in the Vapheio Tomb.

Genius
leading
lion.

To gems of this group may be here added the cornelian lentoid, Fig. 369, said to have been found in Melos,⁴ worn and slightly fractured below, in which another lion-headed Genius is shown leading a lion. In the field above the lion's hind-quarters there appears what seems to be an imperfect 8-shaped shield, of the significance of which, as a religious symbol, something has been already said.⁵ It may be thought to connect itself in a special way with the young warrior God.

We are thus led to another important group in which the Genii appear as if executing divine behests or as actually ministering to the Minoan Goddess or the youthful God.

Before describing scenes in which they appear in direct relation to the God-head, a class of seal-stones must be referred to in which the Genii are seen acting as vegetation spirits, holding libation vases or pouring magical draughts of water upon baetylic pillars, altar blocks and holy cairns, or, as already noted, into a chalice before the sacral horns and nursling palm shoots. Seal impressions described below⁶ couple them with relatively huge barley-corns, as harvest-bringers and guardians of granaries.

¹ *P. of M.*, iii, p. 182 seqq.

² *Ibid.*, p. 184, Fig. 127. The conventional head of the palm, however, introduced into the field, rather recalls the scene on Cup A.

³ *Ibid.*, p. 183 and note. *Cl.*, too, *Jahres-*

hefte d. oesterr. Arch. Inst., ix (1906), pp. 264, 295.

⁴ A. E. Coll.

⁵ *P. of M.*, iii, p. 314 seqq.

⁶ See below, pp. 626, 627, Fig. 614.

Relation of Genii ewer-bearing to 'Talismanic' Class of Seal-stones.

To understand the function of the Minoan Genii as waterers and promoters of vegetation it is necessary to recall a special function of the seal-stones themselves on which these representations appear. They were, in fact, largely worn as charms to secure certain material benefits of more than one kind.

Talismanic class of bead-seals with libation vessels.

In the present case it will be seen that the vessels borne by these daemons, with their mostly prominent spouts, fit on to the motives of a series of talismanic seal-stones that were already in very general use in the Age immediately preceding that to which the bulk of these seals belong. Some account of the general category of engraved stones to which this series belongs has already been given in the First Volume of this work, where their talismanic or amuletic character is clearly demonstrated.¹ From the hasty execution of many of these intaglios and their conventional designs it might at first have been thought that they belonged to the very close of the Minoan decadence. The occurrence, however, of many stones of this class, including specimens with spouted vases, in the graves of the Sphungaras Cemetery in East Crete,² belonging to M. M. III and the succeeding L. M. Ia stage³ shows that they are really a product of a very flourishing period of Minoan Art history. It is clear, indeed, that some of the types of this magical class, such as the lion's mask, go back to the Second Middle Minoan Period.⁴

M. M. III - L. M. Ia date.

The area in which by far the greatest number of these have come to light is the Province of Siteia, comprising the Easternmost district of the Island, though they are also found in Mirabello, Pedeadia, and Central Crete generally, including Knossos,⁵ and extend sporadically to Polyrrhenia in the extreme West.⁶ Among common types of this class

¹ *P. of M.*, i, pp. 672-5, and cf. Figs. 492, 493.

² E. H. Hall, *Sphungaras* (*Univ. of Pennsylvania Museum, Anthropological Publications*), pp. 70, 71, and Fig. 45. See on this, *P. of M.*, i, p. 672.

³ Some imported specimens of this class, of greenish faience, were found in Melian tombs associated with pottery of the L. M. Ib style, see *P. of M.*, i, *loc. cit.* Two of these faience specimens are in the Collection of the British School at Athens.

⁴ A kindred 'lion's mask' type appears in

the hieroglyphic series.

⁵ E.g., Xanthudides, 'Εφ. 'Αρχ., 1907, Pl. 8, No. 155, high-spouted vase, 156, flying eagle. A ship type of this class is also from Knossos (No. 49), another from Phaestos (No. 80, Pl. 7), a sepia appears on one from Rethymnos (No. 74), *Scripta Minoa*, p. 209. Cf., too, Nos. 40 and 46 for similar types of spouted vase.

⁶ I have impressions of two specimens from that site, one apparently a conventionalization of the octopus type, another a degradation of a spouted vase between branches.

are lions' masks—perhaps to give physical strength—stricken wild goats (for hunters), fish, and octopods or sepias, ships, pillared structures, and the Double Axe. It is an interesting coincidence that many of these stones, once made to secure magic protection or divine aid to the old Minoan folk in their various vocations, were re-used—especially those of lighter hue—by the Cretan mothers of our times for their own physical needs, and are hence known as 'galopetras' or 'milk-stones'.¹

Vegetation Charms.

Vegeta-
tion
charms.

The talismanic class of seal-stones with which we are here concerned, presents three varieties of vessels, which, however, appear in similar connexions. These stones may be comprehensively described as 'vegetation charms'.

An important place among them is taken by a kind of pedestalled chalice with two S-shaped handles, and usually, though not always, capped by a conical cover. Examples of both types are given in Fig. 370, *a, b, c*,² the first of special interest from the appearance above the prostrate branch—itsself an emblem of vegetation, and which in other cases is an upright shoot—a rayed circle that may be regarded as a sun symbol. A better pictographic rendering of drought caused by the scorching summer sun of Crete could hardly be imagined, and the chalice itself would be naturally associated with rain-bringing rites.

A cornelian lentoid with two upright branches on either side of the chalice was found on the site of Knossos in 1898. In other cases, as in Fig. 370, *c*, the cup appears above a wide base which has the appearance of a gate with a fence, such as is also suggested by Fig. 372, *a*, below. In *b* and *c* we see the chalice surmounted by a conical cover. On a specimen in the Finlay collection³ the vessel is set against a kind of framework.

The
kan-
tharos.

It is clear that the vessel itself belongs to the 'kantharos' type, to the introduction of which into Crete early in the Middle Minoan Period, from models in silver plate, attention has been already called in this work.⁴

¹ This circumstance greatly assisted me in acquiring Minoan bead-seals during my earlier travels in Crete.

² Two of these stones were found near the site of Goulàs (Fig. 370). *a* I purchased on the site at Hagios Andonis; *b* was obtained by me at H. Nikolaos. *c* was sketched by me at Gràs, near Girapetra. All are cornelian. A

similar type is found on one face of a three-sided seal-stone of the same material from Geraki, Pedeadà, in the Knossian region (Xanthudides, 'Εφ. Ἀρχ., 1907, Pl. VII. No. 47, γ).

³ In the British School, Athens.

⁴ *P. of M.*, i, pp. 191-3, and Figs. 138, 139.

The widespread use of this form of vessel for some simple popular rite designed to promote vegetation is itself of singular religious interest. As a symbol of cult it survived into Hellenic times to be taken over by



FIG. 370. *a, b, c.* 'KANTHAROS' TYPE ON TALISMANIC BEAD-SEALS FROM EASTERN CRETE.

Dionysos—the Wine God—whose special relation to Ariadnê marks him as the representative of the youthful male consort of the Minoan Goddess.

From the Seventh Century onwards the *kantharos* appears as the special coin-type of Naxos,¹ wreathed with ivy-leaves and with bunches of grapes hung from its handles, coupled later—as also at Minoa and elsewhere—with the head of Dionysos.

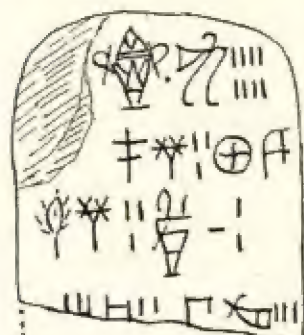


FIG. 371. H. TRIADA TABLET WITH COVERED CHALICE.

With reference to the conical cover it is interesting to observe that it recurs over a two-handled cup on two of the H. Triada tablets of Class A. On one of these, Fig. 371, it is followed by 'the two-legged axe', and a ship sign terminates the inscription.

In contrast to the original connexion of these two-handled chalices with the Troadic province stands another class of vessels of undoubtedly Egyptian derivation, associated with these 'talis-

Spouted libation vessels—as Egyptian.

manic' gems. These are the one-handled ewers, also of metallic shape, with a curving spout rising from the body like that of a coffee-pot (Fig. 372). The type itself already appears amongst the Minoan hieroglyphic signs, and as pointed out by me in *Scripta Minoa*,² resembles in its characteristic spout the well-known class of Egyptian libation vases, *qebek*, with the handle

¹ *B.M. Cat., Crete and Aegean Islands* (Warwick Wroth), p. 110 seqq. and Pl. XXV. I have also seen an early gem of the

Melian class—c. 700 B.C.—of pale steatite with a *kantharos* design.

² Vol. i, p. 179, No. 40.

added, as usual with Cretan adaptations of Egyptian forms. In spite of the further evolution of the pedestal this relationship can hardly be doubted, though it must be borne in mind that handled and spouted vessels, such as the silver, teapot-like vase from the Byblos tomb,¹ had continued in use on

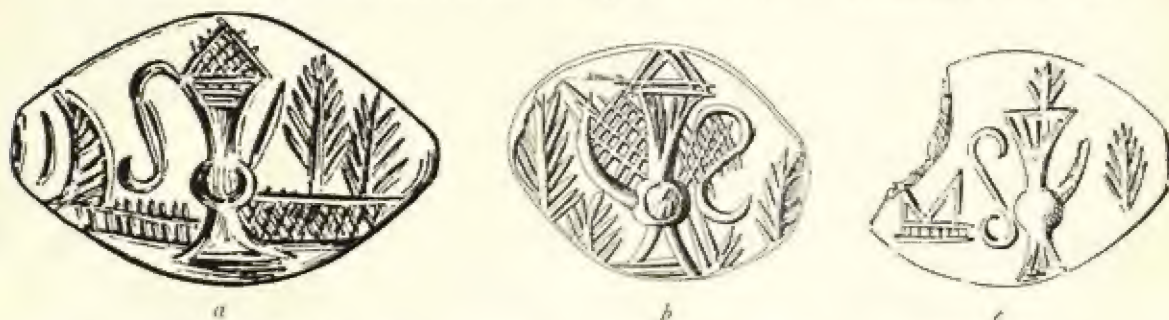


FIG. 372. HIGH-SPOUTED EWERS ON TALISMANIC BEAD-SEALS.

the Syrian side at a time when the use of spouts was only of exceptional use in Crete.

The coffee-pot shape of this type of vessel is usually (Fig. 372, *a-b*) enhanced by the appearance of a conical lid, similar to that so often seen in the case of the two-handled chalices.

Here, too, the close association with vegetable motives is clearly brought out. In Fig. 372, *a*, we see conventional trees rising within a fence-like enclosure, and it is possible that libations with the general object of promoting vegetation were often made before a sacred tree or grove. The horn-shaped spray to the left may show the reaction of the 'Sacral Horns'. Complete 'vegetable' Horns also occur. At other times, a spray or branch rises from within the vessel. In *c* this is supplemented by a similar vegetation symbol before the spout,² while behind is the 'mountains' or 'earth' sign—a frequent hieroglyphic form³—here on a kind of base. On a three-sided clay sealing the branch and the 'earth' sign are coupled with the 'plough'.⁴

¹ See *P. of M.*, ii, Pt. II, p. 825, Fig. 541, *a*, and *ibid.*, p. 654. (Cf. Ch. Virolleaud, *Syria*, iii, p. 273 seqq.). A later Cretan parallel is supplied by the tea-pot-like vase of faience from the Central Palace Treasury at Knossos (*P. of M.*, ii, Pt. II, p. 825, Fig. 541, *b*).

² On a cornelian bead-seal obtained by me at Girapetra (Hierapytna) in 1894.

³ *Scripta Minoa*, i, pp. 223, 234, No. 114, where Hittite, Egyptian, and Babylonian parallels are given.

⁴ For the connexion with the vegetable sign, see *Scripta Minoa*, Pl. II, p. 26, *b, d*, p. 29, *c*. In Pl. IV, i, p. 64, *d*, the 'branch' sign appears beside the 'plough', and it is mentioned in the text.

Finally, the most frequent of all this group is the single-handled ewer, varying in form from that with a mere rim showing a slight lip opposite the handle, Fig. 374, *a*, through intermediate varieties to the high-beaked type with a narrow neck, Fig. 373, *a-c*.

Single-handled ewers with projecting lip.



FIG. 373. *a-c*, 'BEAKED' EWERS ON BEAD-SEALS.

It is this type of ewer that we now find in the hands of the Minoan Genii.

Here, as in the associated forms of vessel, the metallic origin is evident, and is well marked by the S-shaped handles. The earliest example of the series known to me is the rimmed type, Fig. 374, *a*, which appears by itself on a face of a three-sided prism-seal of a M. M. III class,

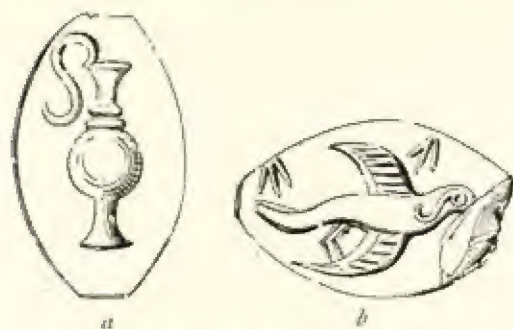


FIG. 374. *a, b*, EWER AND SWALLOW ON PRISM-SEAL (M. M. III): CANDIA DISTRICT.

showing a double ring round the base of the neck very characteristic of metal vessels. It might not be too fanciful to interpret the flying swallow with sprays of vegetation seen on the adjoining face as an emblem of the Spring (Fig. 374, *b*).

As in the case of the other vessels belonging to the present group, these 'branch' or 'vegetation' signs almost invariably accompany the beaked ewer itself.

Associated 'branch' or 'vegetation' sign.

It is constantly coupled with the Earth-sign, between the two peaks of which a spray rests (see Fig. 373, *b*). At times again, the vessel itself is placed above or between the two peaks. On a Cretan lentoid in the British Museum (Fig. 375, *a*)¹ it stands between the 'Sacred Horns'. In this case the fine

¹ *B. M. Cat. Engraved Gems, &c.* (H. B. Walters), Pl. 22 *a* and p. 3.

style of the motive seen on the other face of the stone—a bull struck by a javelin—shows that the intaglio belongs to a good period of Minoan Art.

A red and white agate from near Goulàs—acquired during my first journey in the Island—shows three sprays above a stand.

The type, Fig. 373, *c*, of two high-beaked ewers in opposed conjunction,

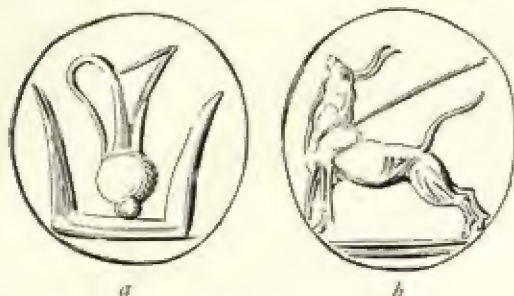


FIG. 375. *a*, *b*, LENTOID FROM CRETE.

with a branch between, on a lentoid sardonyx—purchased by me at Palaikastro on the same journey—is of special interest as a link of connexion with the design on the Vapheio gem, Fig. 378 below, in which two confronted Genii hold up similar vessels in the same anti-thetic manner above triple shoots.

Ewers are also held by these daemons in a similar opposition on the impressed glass plaques (Figs. 379, 380).

The high-beaked, narrow-necked type shown in Fig. 373, *a*, has itself a very ancient suggestion, approaching as it does the form of the prototype of such vessels still to be seen in the 'gourd flasks', so characteristic still of the Caucasian regions. In a more general manner these beaked ewers reflect variant examples of such vessels, traceable in Crete from the earlier Middle Minoan phase onwards and composed of clay and faience as well as precious metals. Vases closely analogous both to these and to the associated two-handled vessels—some at least of gold—occur among the gifts of the Princes of Keftiu in the Rekhmara Tomb.

Presumed Rain-bringing Ceremony on Signet Types of Knossos and Thisbé with Divine Participation.

On the above group of 'talismanic' seal-stones we have collective evidence of a rustic cult intended to promote vegetation. The branches which in almost all cases occur in connexion with the vessels used are sufficient indication of this object. The design on Fig. 370, *a*, indeed, with the vegetable shoot prone beneath the rayed solar symbol affords a speaking corroboration of this. Of what the libations themselves may have consisted in Minoan times we have no knowledge, though they doubtless varied according to the occasions of their use. The *kantharos* in later times connotes wine, or in this case perhaps the juice of a sacred tree such as we see proffered to the Goddess on certain signet scenes. On the other hand the

Rain-bringing ritual: seal-types from Knossos and Thisbé.

fluid may often have been simply water. The ideas of sympathetic magic here enter into the ritual. As the liquid contents were poured from the vessel, so might rain be drawn from the sky and the vegetation be saved from the drought.



FIG. 376 *a, b*. RITUAL SCENES OF POURING LIQUID FROM A EWER INTO A JAR; *a*, ON GOLD SIGNET FROM THISBÊ; *b*, ON CLAY SEAL IMPRESSION, KNOSSOS.

On the tablets of Ras-Shamra (where many of the actual jars to hold such liquid offerings were set in the earth) the magic formula of libation is itself recorded,¹ together with the God's assurance—'if thus thou pourest, thy tree shall be in My keeping'.

In the fuller representation engraved on a gold bead-seal of flat almond-shaped form from a grave at Thisbê in Boeotia (Fig. 376, *a*),² three personages are concerned. A female attendant, such as often accompanies the Minoan goddess, stands with her back to a plant that may in all probability be recognized as a vine,³ pouring the contents of a one-handed jug, showing a neck-ring indicative of metal-work, into a large jar, the metallic character of which is also brought out by its recurved handles.⁴

Ritual
pouring
from
ewer into
jar.

Beyond this, bending over the jar, and with both hands over it in gesticulatory action, is a second female personage, who, from the presence behind of the little handmaiden—one of the pair with which she is so often grouped—may herself be identified with the Minoan Goddess. Her child attendant imitates her gesticulation, which in both cases may have been accompanied by some spoken charm or incantation.

Eight years after the discovery of this Thisbê bead-seal the examination of some fragments of clay impressions from the 'Area of the Daemon

¹ Cf. Virolleaud (cited by Schaefer) *Syria*, xiii (1932), p. 13.

² See A. E., *Ring of Nestor, &c.* (Macmillans, 1925, and *J. H. S.*, xv), pp. 18-20.

IV**

³ From its form and the clusters that it bears, this is obviously the same tree-like version of a vine that occurs on the gold signet from Mycenae.

⁴ Cf. *op. cit.*, p. 18.

II h

Seals' brought out during the excavation of 1901, and temporarily reserved in a tin box placed among the stratigraphic stores, resulted in the discovery of another, abridged version of this hitherto unknown subject (Fig. 376, *b*).¹ Here we see a seated figure on what appears to be a wooden seat of the kind that supplied the prototype of the gypsum throne at Knossos. The enthroned figure, incomplete above—in which we may venture now to recognize the Goddess herself performing the ceremonial—pours the contents of a similar jug into a two-handled jar of the same kind. In front of this are placed the 'horns of Consecration', clearly indicating its religious character. To the right is a plant or small tree, though the impression is imperfect.

We here see in a simplified form the essential features of the scene depicted in Fig. 376, *a*. The vessels themselves are of similar types.

Ewer-holding Minoan Genii and the Part played by them in Similar Ritual.

In the case of the group of 'talismanic' seal-stones illustrated above, the vessels themselves are alone depicted, such as were doubtless used by the heads of households or communities in a rustic ritual. On the more elegantly designed intaglios, mostly of somewhat later date, with which we are here concerned, the imagery appears in a more developed form. The new religious creations, the Minoan Genii, drawn as we have

Ewer-holding Minoan Genii in similar ritual.

¹ The subject of the Thisbê bead-seal (Fig. 376, *a*) belongs to an otherwise unexampled class of ritual representation. Its very existence could not at the time have been known to a forger, and the later emergence of the Knossian sealing must be regarded as overwhelming retrospective evidence of the antiquity of the Thisbê bead-seals—from which this is inseparable—as a whole. All mention of this conclusive datum, to which I already called attention in 1925 (*Ring of Nestor, &c.*, pp. 17-19), has been nevertheless suppressed by those who have endeavoured to impugn the genuineness of the bead-seal. The object itself is inseparable from the rest of the series. Apart from the identical style of engraving, moreover, the back view of the series, reproduced in Fig. 460, p. 516, below shows that this specimen—*a* in the series—which, like the other bead-seals, had some kind of filling within its gold plating, betrays a similar depres-

sion due to the weight of superposed materials that marks the other beads of the series. The whole of the bead-seals thus present similar characteristic features in their condition, pointing to the conclusion that they had lain together in the same grave. See below, pp. 515-517, where the subject is more fully treated, and compare Fig. 460 *a*.

My own long studies in this special material as well as the closely allied numismatic branch may be allowed to weigh in support of the conclusion, after careful and repeated examination, that the Thisbê jewels are one and all genuine. If the exact find-circumstances are not forthcoming this deficiency—unavoidable under treasure trove legislation—is shared by many of the rarest authentic specimens in Cabinets and Museums. Numerous other objects, said to have been found with the jewels, and in their owner's possession, were all, in my judgement, Minoan.

seen, from the serviceable Hippopotamus Goddess of Egypt, now appear as the active agents in such libations. On a whole series of bead-seals, some of which, at least—as the specimens from the Vapheio Tomb show—go back to the flourishing days of L. M. I *b*—these daemonic monsters are seen holding libation ewers of the same class as those repeated in the earlier group.

By this time—the first half of the Fifteenth Century B.C.—the 'anti-thetic' scheme is in full swing, while the great signet-ring from Tiryns shows that the processional arrangement, adopted at this time from Egypt by the Minoan fresco painters, was also followed in representations of these Genii. Even when, as on a sardonyx amygdaloid from the Vapheio Tomb¹ a haematite example 'from a Greek island',² and other similar types,³ only a single daemon is seen holding an ewer, it fits on to one or other of these schemes.



FIG. 377. CORNELIAN BEAD-SEAL: CENTRAL CRETE: A. E. COLL.



FIG. 378. ONYX LENTOID BEAD-SEAL: VAPHEIO TOMB.

On the cornelian amygdaloid, Fig. 377, retrospective light is thrown on the talismanic bead-seal, Fig. 370 *a*, where a two-handled libation vase is flanked by the solar disk with scorching rays and a prone spray of vegetation below. Here the rayed orb appears over the head of a starveling palm-stem, beside which the Genii pour their life-bringing draughts, while, behind each, rises a thriving plant—conveying the assurance of full revival.

Specially informative, too, is the onyx lentoid from the Vapheio Tomb, Fig. 378. The confronted monsters are here seen holding up their libation vases above triple shoots, resembling those of nursling palms. The object from which they rise seems to be rather a large pot than the 'sacral horns'.⁴

Con-
fronted
Genii on
Vapheio
gem
pouring
libations
into
fountain
basin
before
nursling
palm.

¹ *Ep. 'ApX.*, 1889, Pl. X, 36; Furtwängler, *Antike Gemmen*, Pl. II, 31.

² *Berlin Cat.*, Pl. I, 41; Milchhöfer, *Anfänge*, &c., p. 68, Fig. 46, *e*.

³ E.g., *Berlin Cat.*, Pl. II, 53, a greyish green steatite conoid from Cyprus of rough fabric, Milchhöfer, *op. cit.*, p. 68, 46, *b*. The Oriental form is interesting as showing how

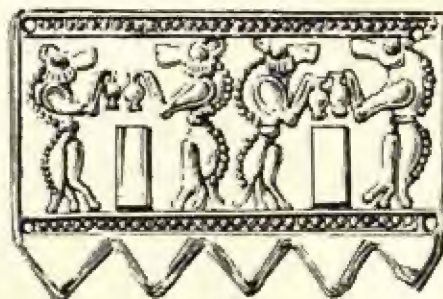
this talismanic subject was taken over into Cypro-Minoan sphragistic Art. Cf., too, the cylinder, Fig. 383, p. 459. The bronze *hydrias* found at Kurion with reliefs of confronted Genii were clearly imported objects.

⁴ This view, given in my original account of this gem type in *Tree and Pillar Cult*, pp. 2, 3 (100-1), has been now corroborated by the

An important feature in this design is the fact that the two Genii here are not engaged in actually watering the shoots of vegetation,¹ but are pouring the refreshing draughts into the basin—regarding the chalice-like



a



b

FIG. 379 *a, b*. IMPRESSED GLASS PLAQUES FROM MYCENAE TOMBS SHOWING CONFRONTED GENII POURING LIBATIONS: *a*, ON TRIPOD CAULDRONS SET OVER SHAFTS; *b*, OVER ALTAR BLOCKS.

profile of which something has been already said—in front of the horns.² This action bears a suggestive resemblance to that recorded in the *Roman de Rou*, where, in order to secure a copious rainfall, the Breton huntsmen in times of drought went to the Spring of Berenton, filled their horns with water and poured it on the steps of the fountain,³ whereupon rain fell abundantly 'in the forest and around'. The pedestalled receptacle on the gem might stand for the artificial basin of a source, for this representation belongs to the Age of an advanced and highly elaborate culture, when, as we learn from the fresco, actual 'jets d'eau' were in vogue.

The *Horai*, the rain-bringers, of Ancient Greece filled their cups from 'sweet-smelling' springs.⁴

A further parallel is supplied by the impressed glass plaque (Fig. 379, *a*) from a 'tholos' known from it as the 'Tomb of the Genii' at Mycenae,⁵ where

remarkable frescoes in the Amnisos houses explored by Dr. Marinatos, showing plants springing from large recipients, like altar bases. Sacral horns, however, at the foot of holy trees are not infrequent, e.g., the lentoid from Palaikastro, *op. cit.*, p. 56 (154), Fig. 31, where they appear at the foot of a palm. A close analogy is also presented by the crystal lentoid from the Idaean Cave, where the 'sacral horns' appear before a central spray, with two others on either side of them.

¹ Such had been my original interpretation

of the design, but see my corrected view and commentary, *Ring of Nestor*, &c., pp. 20, 21.

² See p. 390 seqq., and the enlarged rendering of this object, p. 393, Fig. 329 *a* above.

³ *Roman de Rou*, ii, 6399 seqq. (ed. Andreson, ii, p. 283). Cf. A. E., *Archæologia*, 1885, p. 108.

⁴ This is referred to by Theokritos, *Idyll*, i, 149, 150.

⁵ Near the 'Cyclopean Tomb'. See, too, below, § 116. The tomb had been plundered (see A. E., *Tree and Pillar Cult*, p. 19 [117],

The
Fountain
of Beren-
ton.

Genii
pouring
libations

confronted Daemons are seen pouring libations into what appears to be a tripod cauldron set over a baetylic column. On a dark steatite lentoid from the Knossos district, unfortunately a good deal rubbed, lion-headed Genii

into
tripod
cauldron
over
pillar:
and on
altar
block.



FIG. 380. IMPRESSED GLASS PLAQUE, MYCENAE; LIBATIONS OVER CAIRN.

of the same late type with beaded manes and upraised forepaws, as if in the act of adoration, face a column which seems to support a basin.

On another impressed glass plaque, Fig. 379, *b*, from the same tomb as Fig. 379, *a*, the ritual act of pouring libations from two ewers is twice repeated by a pair of Genii over a square-cut upright altar block. The libations thus poured curiously recall a rustic ceremony which came to my personal knowledge in the then Mahometan, though Bulgarian speaking, village of Ibrahimovci in the Upper Vardar Valley. In a conspicuous place there, lying on its back, I found a Roman altar dedicated to Jupiter Optimus Maximus by a Duumvir of the neighbouring *Colonia* of Scupi, and learnt that in times of drought the villagers, Christian and Mahometan alike, with a local Bey at the head, went in a body to the stone. It was then set upright and wine was poured over it, while prayers were offered up for rain.¹

On an impressed glass plaque from another Mycenae tomb² (Fig. 380) two confronted Genii pour libations over a heap of stones—evidently a sacred cairn—in place of the altar blocks on the other. The similar heaps, on which the little handmaidens stand, on the well-known gold signet from Mycenae—one of them using it to reach down the fruit of the sacred tree for the seated Goddess—may well have a religious signification. In another case the Goddess herself appears seated on a small pile of rocks,³ there conventionally rendered as three globules.

Libations
over
cairn.

note 6, and Fig. 14, and cf. Tsountas, *Πρακτικά*, 1896, pp. 29-31). The subjects of this and Figs. 379 *b*, 380 were drawn for me by Monsieur Gilliéron, père, with the kind permission of their excavator, Dr. Tsountas.

¹ See A. E., *Antiquarian Explorations in Illyricum*, iii (*Archaeologia*, 1885), pp. 104-8.

² A rock-cut square chamber with *dromos*, N. of the Akropolis.

³ On a green serpentine lentoid: A. E.

Coll. A female adorant stands before the seated Goddess, and between the two figures appear the 'horns of Consecration'. This is the intaglio, then in the Bourguignon Collection at Naples, figured by Furtwängler, *A.G.*, p. 37, from an imperfect impression. The 'sacral horns' are there referred to as probably part of a basket, and the conventional rocks are incompletely given.

**Minoan Ewer-holding Genii on
Bronze 'Hydrias' of Ritual Usage
from Kurion, Cyprus.**

Perhaps the best record of these beneficent divine agents preserved by Minoan Art is to be found in the decorative reliefs of a pair of bronze '*hydrias*' found at Kurion, Cyprus. From the repetition, moreover, of the characteristic ewer that they hold as a separate feature round the rim of one of these, it may be inferred that these great bowls had been associated with the libation ewers in ritual ceremonies such as those above referred to. It is interesting, indeed, to recall the fact, already noticed,¹ that this bronze '*hydria*' form must be regarded as the prototype of a widely diffused class of Late Minoan and Mycenaean painted clay '*kraters*', so frequently forthcoming in a sepulchral connexion. In the Temple-Tomb at Knossos they clearly formed part of a service devoted to a memorial cult of the interred—the last scion, it may well be, of the House of Minos.

A description of the bronze '*hydrias*' has been already given.² The more recently published of these³

¹ See above, Pt. I, pp. 310, 311, and Figs. 245, 246.

² *P. of M.*, ii., Pt. II, pp. 652-4, and Figs. 417-19.

³ M. Markides, *B. S. A.*, xviii, Pl. VIII, and pp. 94-7 (it is there, however, wrongly dated to the XIVth century B.C.). The fellow *hydria* from the same site—which has not the evidence of date supplied by the fine 'marine'



FIG. 381. HANDLE OF BRONZE '*HYDRIA*'
FROM KURION.

style relief—is well known. (See Perrot et Chipiez, *L'Art dans l'Antiquité*, iii, pp. 794-6; and cf. J. L. Myres, *Cesmola Collection*, 478-9, No. 4703.)

has a special interest in relation to our present subject. Its handles (see Fig. 381) present on each side four figures of Genii of the lion-headed

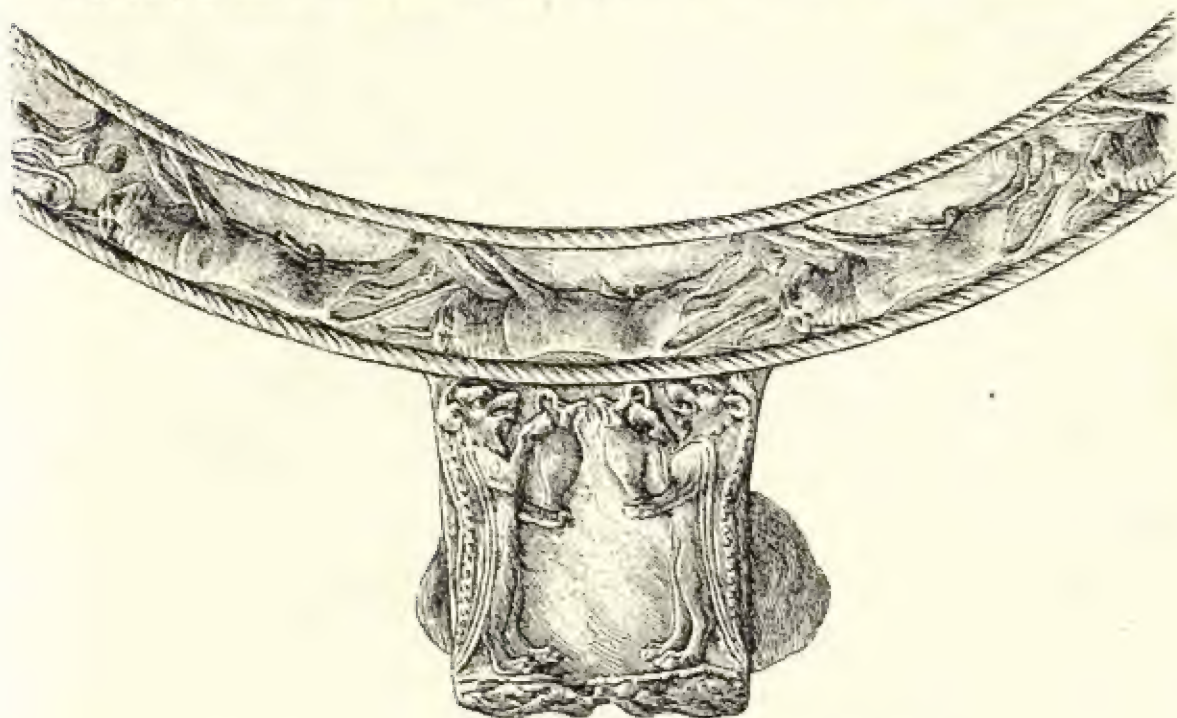


FIG. 382. HANDLE AND RIM OF ANOTHER 'HYDRIA' FROM KURION.

type, with one paw raised and the other lowered, facing an elongated central object. At the same time the plates of attachment bear reliefs consisting of cuttle-fish of the six-armed variety, coiling 'brittle-stars', rocks and sea-tang in the most naturalistic 'marine' style, for which Knossos was the unrivalled centre. It looks, indeed, as if we have here the handiwork of a Palace artificer of the L. M. Iæ Period, and dating not later than the latter half of the Sixteenth Century B.C.

The suggestion made by me in the Second Volume of this work regarding the elongated object that the Genii face on the handles of this vessel still holds good.¹ May it not be based on a reminiscence of the Sacred Crocodile? This itself was of astral significance, specially associated with the Hippopotamus Goddess, who constantly bears or holds it.² The warted surface of the object may well be taken to represent the scales—the body

Suggestions of crocodile between Genii.

¹ See *P. of M.*, ii, Pt. II, p. 653, Fig. 418.

² See p. 434, Fig. 356 *a*, *b*, above.

of the sacred reptile is in fact so shown on some Egyptian examples—and there are traces of short legs.

On the fellow *hydria* from Kurion, long since known, the leonine features of the monsters are well delineated. In this case, they hold the spouted ewers usual with the Genii, and are associated with bulls' heads on the attachment plates, while a series of bulls are shown at a flying gallop round the rim (Fig. 382).¹ It is clear that this vessel must be regarded as a contemporary fabric, from the same Knossian source.

Ta-urt and the Minoan Genius on Cylinder Seals.

In connexion with this relatively early appearance of the Minoan Genii on vessels of ritual usage found in Cyprus must be mentioned the hitherto unnoticed occurrence of figures, both of a form of Ta-urt and of the typical Minoan daemon, on cylinder seals.

Versions
of Ta-urt
on
'Syro-
Hittite
cylinder.

A cylinder is included by Ward in his 'Syro-Hittite' series showing 'the Goddess with robe withdrawn',² which is of the normal Oriental kind including some Egyptian elements. On it a little effigy, recalling Ta-urt, but without fore-arms, appears—as an accessory feature and on a miniature scale—to the left of the winged canopy that rises above the Goddess, here quite nude, standing on her bull. The little figure has in this case a kind of double plume above its head, but that we have to deal with some form of the Egyptian Ta-urt is made probable by the intrusion of other elements of Nilotic origin into the design, such as the *tan*-cross. The canopied Goddess here seen above the bull recurs in another scene with a dove flying towards her. We have thus a good example of the meeting of heterogeneous elements on this class of cylinder.

Minoan
Genius
on haem-
matite
cylinder
found in
Crete.

More definite evidence is supplied by the cylinder, Fig. 383, which was said to have been found in Crete.³ It presents a typical figure of the Minoan Genius itself, performing a usual function. The daemon is lion-headed, and furnished with the mane and dorsal appendage, rather summarily rendered, and holds a spouted vase of the same kind as that repeated on the bronze *hydrias*. As in the case of certain Minoan types illustrated above, he seems to be about to pour libations over a low pillar that rises in front of him. The

¹ Reproduced from Perrot et Chipiez, *L'Art dans l'Antiquité*, iii, p. 794, Fig. 555.

² *The Seal Cylinders of Western Asia*, p. 299, No. 930. Owing to the absence of forelegs

it is there described as 'a hawk', but the mane and snout are clear.

³ It was brought to me in company with some Minoan bead-seals of normal types.

scene is not completed as in the case of the Tiryns signet by a seated Goddess, but the object of the worship is sufficiently indicated by the flying dove above the ewer.

Connected with Dove Goddess and Man-bull.



FIG. 383. HAEMATITE CYLINDER FOUND IN CRETE SHOWING MINOAN GENIUS.

In front of the Genius is a standing figure—facing above, in profile below—of a man-bull, with his forearms folded inwards as in the case of the young God beside the Genius on the gem shown in Fig. 392 below. His belt and loin-cloth are Minoan, and, except for the facing head and standing or pacing attitude, it might seem natural to identify this semi-bovine figure with the 'Minotaur' types of Late Minoan bead-seals. It must be observed,

indeed, that a parallel pair of erect man-bulls—though in non-Cretan loin-clothing—is exemplified by a cylinder (Fig. 384)¹ of a typical Syro-Anatolian



FIG. 384. 'SYRO-HITTITE' HAEMATITE CYLINDER SHOWING MAN-BULLS.

group in association with a God in Hittite garb and the naked Goddess. Here, too, the dove appears as a symbol. Once more we are led to infer a good deal of coalescence of Minoan and Oriental religious imagery at this time.

The cylinder (Fig. 383) is of haematite, as is usually the case with the Syro-Hittite and Cypriote group.² That the cylinder form was also occasionally used in Crete and Mainland Greece at this time is established by several examples, of which a good specimen is illustrated in Fig. 387 below.³ But the intaglios on these follow the usual Minoan tradition in the style of their designs, while the cylinder before us (Fig. 383), though exceptional in including a

Probably of Cypriote Minoan fabric.

¹ Ward, *op. cit.*, p. 285, and p. 286, No. 869. seals are also not infrequent.

² Late Minoan lentoid and amygdaloid bead- ³ P. 463.

figure of the Minoan Genius, otherwise illustrates the processional and mechanical methods of the Oriental class. On the whole, it seems best to regard this cylinder as having been made in Cyprus, but as fitting on to a well-ascertained 'Cypro-Minoan' class.¹



FIG. 385. LARGE GOLD SIGNET-RING FROM TIRYNS HOARD. GENII BRINGING LIBATIONS TO SEATED GODDESS.

Scene of Offering on Great Tiryns Signet.

Minoan
Genii as
ministers
of Youth-
ful God.

To the ritual episodes above illustrated in which these daemonic creations are presented to us as pouring libations in connexion with certain sacred objects—trees and baetylic columns, cairns and altar-blocks—must be added another class in which they act as direct ministrants to the divinity.

Of this the most important illustration is supplied by the huge gold signet-ring found with other relics in a bronze cauldron near Tiryns in 1915² (Fig. 385).

The Goddess, grasping a pedestalled chalice, more fully illustrated above,³ is seated on a folding-stool, which below resembles those of the Palace group of frescoes, but with an inconsistent adjunct in the shape of

¹ I ventured to assign a series of Cypriote seal-stones to this class ('Cypro-Mycenaean' as there described), in *Mye. Tree and Pillar Cult*, p. 50 [148] seqq.

² G. Karo, *Arch. Anz.*, 1916, p. 143 seqq., and pp. 147, 148, Fig. 5. The length of the bezel of this ring is 5.8 cm., more than twice

the size of the well-known gold signet from Mycenae. It is also considerably larger than the gold signet-ring found by the Temple-Tomb at Knossos (§ 117, Pt. I) and the largest of those from Thisbê (A.E., *Ring of Nestor*, &c., p. 9, Fig. 9.

³ See above, p. 393, Fig. 329 a.

a high back, curving up behind. She wears a long robe, that could be opened down the front and showing a descending double band—a quite different fashion from those of the seated votaries of the 'Camp-Stool Frescoes'.

Design
on
Tiryns
signet.

Above, as on the gold signet-ring from Mycenae, is a reserved compartment representing the sky, and with the orb and crescent of the sun and moon. Whether or not the minute dots or small dashes engraved in the field that encloses them, represent the starry firmament must remain a moot point, but the sprays of vegetation set against the background may fairly suggest a comparison with those that characterize the talismanic class of seal-stones above described.

Behind the throne is visible the corner of an altar, or some other sanctuary structure, above which a bird descends with lowered wings. It is another version of the Minoan religious incident, so often repeated, in which the celestial Spirit in bird-form is depicted flying down or actually alighted on the object of divine possession, whether animate or inanimate.¹ The curved decoration visible on the structure is more fully explained by the architectonic frieze that underlies the whole group, displaying a succession of the half-rosette and 'triglyph' motives of Minoan friezes.²

Pro-
cessional
scheme.



FIG. 386. GENIUS BETWEEN LION GUARDIANS OF DIVINITY SEATED ON ARCHITECTURAL BASES.

On the platform above this frieze four lion-headed Genii—in accordance with the processional artistic fashions

then in vogue—approach the Goddess, each in the same attitude, holding between their paws high-beaked ewers of the usual type, to fill the chalice-shaped goblet already described, which the Goddess holds up for that purpose.

As a pendant to the above may be here given the design (Fig. 386) on a lentoid from a tomb of the lower Town of Mycenae, where a Genius appears between the two lion-guardians of the Goddess, each seated on an architectural base. It is in fact the same scheme as that found on a series of lentoid bead-seals in which the Goddess, in these cases bearing a 'snake-frame', stands between her attendant monsters—sometimes lions, sometimes griffins—set, as here, on cornices raised above the level on which

Genius
between
lion
guardian.

¹ See especially, *P. of M.*, i, pp. 223, 224.

² *Ibid.*, ii, Pt. II, p. 605 seqq.

she herself is set.¹ It may be said that in this case the Genius stands as the representative of the Goddess or her youthful Consort tending her guardian lion.

The Genius as Guardian Spirit of a Minoan lion-slaying Héraklès.

Thanks to the kindness of Mr. James Loeb it has been possible to illustrate in Fig. 387 a novel and highly interesting aspect of the Minoan Genius acting as the spiritual ally of a warrior who attacks a lion.

Cylinder
from
Kakova-
tos :
Genius
a guar-
dian of
lion-
slaying
hero :
the
Minoan
Héraklès.

The seal itself supplies an interesting example of a Minoan cylinder, executed in a variegated greyish yellow agate. It was found in the spring of 1913 by Mr. Ashton Sanborn, the Secretary and Librarian of the Boston Museum of Fine Arts, in a little brook near the shore at Kakovatos, or 'Nestor's Pylos',² already distinguished by the rich Minoan relics found in its bee-hive tomb. These included a series of the finest L. M. Ió 'amphoras', and the gold signet-ring referred to as the 'Ring of Nestor',³ that has afforded us our first glimpse of the pre-Hellenic Underworld.

It will be seen at once that the episode of the warrior huntsman attacking a lion is a variant of that depicted on the gold bead-seal from the Third Shaft Grave at Mycenae, here repeated in Fig. 388.⁴ In the present case the lion stands upright on his hind-legs, and his assailant thrusts the point of his short sword into his mouth. The guardian Genius stands behind, and gives a magic direction to the sword-stroke by bringing his fore-paws together on its sheath. The assailant's attitude exactly corresponds with that of the Mycenae bead-seal.

The hero of this episode may be regarded as a kind of Minoan Héraklès, who, however, relies on his sharp blade rather than on simple brute strength.

¹ See above, p. 169, and Figs. 130, 131, and 132. The cornices are clearly visible on the examples from the Diktaean Cave and Ialysos, in the latter case sloping upwards to give more space in which to engrave the bodies of the Griffins. On other types, as those from Mycenae (p. 170, Fig. 133, *a* and *b*), the Goddess and attendant lions are together placed on a double architectonic base.

² This information is due to the courtesy of the late Mr. James Loeb, who sent me the excellent cast from which Monsieur E. Gilliéron, fils, executed the drawing for Fig. 387.

³ See *P. of M.*, iii, p. 145 seqq., and my

separate publication, *The Ring of Nestor: A Glimpse into the Minoan After-World*, &c. Macmillan, 1925 (and *J. H. S.*, 1925).

⁴ From *P. of M.*, iii, p. 125, Fig. 78 (from a drawing by M. Gilliéron, fils). See Schliemann, *Mycenae*, p. 174, Fig. 78; Karo, *Schachtgräber*, Pl. XXIV, 33; Furtwängler, *Antike Gemmen*, ii, 9, Pl. II, 14. The type was copied in his own fashion by a Greek engraver of c. 300 B.C. on the ivory bezel of a ring from a tomb near Canca. (See *P. of M.*, iii, *loc. cit.*, Fig. 79.) On one of the Thisbè bead-seals a warrior thrusts a spear into the mouth of a lion.

The same geste is recorded on the Mycenae seal, but we now know that the hero was under divine protection.¹ Both intaglios are clearly of more



FIG. 387. AGATE CYLINDER FROM KARKOVATOS (I).



FIG. 388. WARRIOR STABBING LION ON GOLD BEAD-SEAL, MYCENAE (I).

or less contemporary work, hardly later than the close of the First Late Minoan Period, after which the 'flat cylinder' form of Fig. 388 becomes rare.

Analogy of Ta-urt assisting Horus against Ox of Set.

The assistance rendered to the lion-slaying hero in the above scene curiously corroborates the parallels already drawn between the Minoan Genii and the Hippopotamus Goddess.

It will be seen that in a series of examples of the strange daemonic creations, these Genii also appear as supporters or ministrants of what, as best shown on Fig. 391, below, must be interpreted as a youthful male God.

In view of these connexions, it seems to be certainly worth recalling a suggestive analogy presented by the astronomic scenes above referred to in which Ta-urt—*ex hypothesi* the prototype of the Minoan daemons—regularly appears in connexion with the youthful Horus, whom she assists against the hostile power of Set. In one case, as we have seen (Fig. 360 above),² she holds the chained ox that symbolizes the constellation in the Northern heavens, while Horus strikes its head with a spear—just as the

Analogy
of Ta-urt
and
Horus.

¹ It is, as Professor M. Nilsson points out, a primitive point of view to attribute to heroes such exploits as the killing or capturing of wild animals, and he concludes that the slaying of lions and other animals and monsters goes back to a Mycenaean or Minoan

cycle (*The Mycenaean Origin of Greek Mythology*: Sather Lectures, University of California, 1932, pp. 217, 218). The Minoan lion-killer here depicted under divine guidance corroborates this view.

² See above, p. 437.

Minoan Hēraklēs, aided by the Genius, drives his blade into the lion's mouth on the cylinder, Fig. 387. That these ceiling compositions, representing the celestial functions of Ta-urt, supplied, in fact, her prevailing aspect as brought to the notice of the Minoans at the very epoch when these imitation daemonic forms took shape with them, is well demonstrated by the Tomb of the great Vizier Sen-mut who stood in the most intimate relations with the princes of Keftiu (Fig. 362, above). We have seen that these astronomic schemes had left their mark on the Minoan seal types in which the Genii figure. The stars beside the stag-bearing daemon of Fig. 364 are specially suggestive, as is the ox-leg of Fig. 365.

We may here recall that in the 'Book of the Dead' the Hippopotamus Goddess is identified with Isis or Hathor, the natural guardian of the child Horus, while on the other hand, there is sufficient evidence of the reaction of this Goddess or of Wazet, with whom she was assimilated, on the Minoan Cult.¹ The influence of the old Delta Goddess and her son is continuously preserved in Minoan religious Art, notably in her distinctive *waz* or papyrus wand and in the symbolic group of the cow and calf or its Cretan equivalent the she-goat suckling its young. But what is especially important to observe is that, in addition to these mythological records, old Nilotic cult forms and ritual objects such as they existed before the coming of the First Egyptian dynasty, survived over a considerable area of Central Crete, including the site of Knossos itself. The evidence of this, as shown especially by the primitive bee-hive tombs of Mesarà, certainly warrants the conclusion adopted in this work,² that the invasion of Menes had actually led to a partial migration of some of the older proto-Libyan inhabitants of the Delta to Southern Crete. This evidence, indeed, has been now corroborated by the most telling example of this religious tradition yet brought to light, the discovery in the Temple Tomb at Knossos of a cylindrically bored libation block, cut out of an igneous rock,³ exactly answering to a typical late pre-dynastic class and standing at the head of the Early Minoan copies of such vessels already known from the Mesarà graves.

At the same time this ethnic intrusion must not be allowed to obscure the fact that the more deeply rooted element in the early Cretan population should be regarded as fitting on to the kindred 'Old Carian' stock on the Anatolian side. The Minoan Mother Goddess and her male satellite belongs to this, as does her sacred Double Axe symbol. Only in the present case—as happened also on the Syrian border of this Asianic

¹ See especially, *P. of M.*, i. p. 509 seqq. 45, and Fig. 20.

² See especially, *P. of M.*, ii, Pt. I, pp. 44, ³ See below, § 117, Pt. III.

Early
religious
influence
in Crete
from Nile
Valley.

Pre-
dynastic
Libation
Table
from
Temple
Tomb.

group—a certain coalescence with the Nilotic Cult of Mother and Son undoubtedly took place as a result of historic causes.

The interaction of the two influences is continually traceable. Where the tiara occurs on the head either of the Goddess or her youthful consort, it must evidently be regarded as an Oriental token. But the serpent's head rising from that of the faience image of the Minoan Goddess found in the Temple Repository is clearly reminiscent of the *uraeus* of her Egyptian sister. So, too, the Genii that reflect the hippopotamus form of Isis might well protect the Cretan version of the young God.

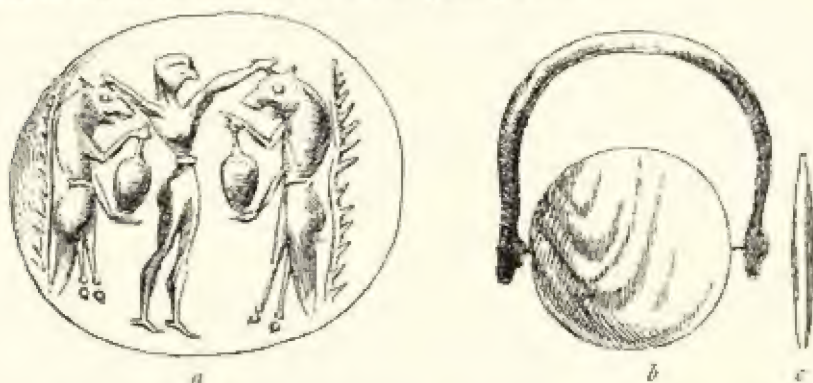


FIG. 389, *a*, *b*, *c*. REPRODUCTION OF ORIGINAL FIGURES OF RING (SAID TO BE FROM ORVIETO TOMB) IN *ANNALI DELL' ISTITUTO*, 1885. THE HEADS ARE HERE MADE BY THE COPYIST TO RESEMBLE THOSE OF BULLS. (*c*. $\frac{2}{3}$).

Minoan Genii as Supporters of Young Male God.

Two of these ewer-holding daemons confronting a youthful male figure, who apparently lays his hands on their forelocks, appear on an agate lentoid set in a bronze ring, which was one of the earliest known Minoan gems. It was published in 1885,¹ in the misleading form reproduced in Fig. 389, which is unfortunately its only record, and was said to have been found

Minoan
Genii
as Mini-
sters of
divinity.

¹ O. Rossbach, *Annali dell' Istituto*, 1885, PL. GH8, and p. 195. The Genii ('*esseri misti*') are there described as with lions' heads, and the male personage is said to seize their ears (probably the crests of the manes). But—contrary to this, now well-supported, archaeological description—the artist of the Plate in the *Annali* already provided the monsters with bulls' heads. Helbig, *Question Mycénienne*, p. 32 [325], Fig. 24, gives a bad copy of this

misdrawing. In Prof. A. B. Cook's *Animal Worship in the Mycenaean Age*, iii (*J. H. S.*, xiv, 1894, p. 122, Fig. 14) the bulls' heads are repeated, and the daemon is clearly grasping their horns. The Genius itself is given the head of a bird. Furtwängler (*A. G.*, iii, p. 37, Fig. 167), though partly retaining Rossbach's description (with a modification of the bird's head, but a full adoption of the horns), gives what is otherwise a copy of the *J. H. S.* figure.

in an Etruscan tomb at Orvieto. Rossbach rightly recognized the leonine character of the daemons' heads but owing to careless execution of the intaglio, his artist misinterpreted them as heads of bulls, and this feature



FIG. 390. ROCK CRYSTAL LENTOID FROM PHIGALIA; TWO GENII SALUTING MALE GOD.

has been repeated in subsequent illustrations of this subject. The object, formerly in the Castellani Collection,¹ has since disappeared.²

The characteristic attitude of the male figure laying his outstretched hands on the heads of the Genii conforms with that of the young male God between two lions on a lentoid gem from Kydonia³ (Fig. 391 *bis*).



FIG. 391. GENIUS BETWEEN TWO YOUTHFUL ATTENDANTS. HYDRA. (2½)

An intaglio in rock crystal from Phigalia⁴ (Fig. 390) shows two opposed Genii, without ewers, with a central male figure, who apparently raises his hands to be licked by their long tongues. The rendering of animals with protruding tongues is a recurring trait of the Minoan engravers; we see it in the case of the wolves, or dogs, of the hieroglyphic series, and of lions, bulls, and stags on bead-seals and signets.

The legs of the monsters here are abnormally attenuated. It was this, and similar representations, that suggested to Milchhöfer the idea of daemons with birds' or even insects' legs.⁵

On the banded cornelian from Hydra⁶ (Fig. 391) we see the scheme reversed. The Genius here is essentially of the leonine type but has been alternatively invested with a horse's or an ass's skin, the youthful ministers being described as subduing it, 'probably by the help of incantations'. The beneficent Minoan daemon did not need to be dealt with in this way.

¹ Seen there by Furtwängler in 1884.

² Dr. A. H. Smith, Director of the British School at Rome, kindly looked through the Collection (now in the Villa Giulia), but all his investigations proved fruitless.

³ A. E., *Myc. Tree and Pillar Cult*, p. 63, Fig. 43. ⁴ *Berlin Cat.*, Pl. I, Fig. 10.

⁵ Overbeck, *Kunstmythologie*, iii, 683 seqq.; Milchhöfer, *Anfänge der Kunst*, p. 58 seqq.,

and cf. p. 65, where they are compared with locusts and grasshoppers, and mythological consequences are drawn from this.

⁶ Banded cornelian, B.M. Coll., no. 41, and cf. *J.H.S.*, 1897, Pl. III, 5 and p. 68. Furtwängler (*A.G.*, iii, p. 38) curiously misinterprets the ministering function of the two attendants — 'sie bändigen ihn wohl mit Beschwörung, sie sind seine Herren'.

Ewer-holding Genius with Young Male God, on Bead-seal from Kydonia.

The most interesting association of a Minoan Genius with the youthful male God is afforded by the intaglio designs (Fig. 392) on a lentoid bead-seal of Spartan basalt referred to¹ in an earlier Section of this work in relation to the winged creations of Minoan Art. It was found at Pyrgos Psilonero, near the site of Kydonia, and the fact that it was made of lapis Lacedaemonius does not militate against its having been the work of a Cretan engraver, since great stores of this material were found in a small magazine on the East side of the Knossian Palace, showing marks of cutting for decorative usage.²

Bead-seal of Spartan basalt from Kydonia.

The youthful personage—the divine character of whom is clearly marked by the sacral horns placed at his feet—is shown naked except for his belt, with clenched hands pressed to his thorax. To the left is a winged goat, not, as on a Zakro impression, a winged goat-man, but in its way a more literal illustration of the be-winging tendencies of Art in the land of Daedalos. The tail and hindquarters of the goat at the same time suggest an incorporation with the lion-type.

Behind the youthful figure to the right stands a Minoan Genius, holding a beaked ewer between his fore-paws in the usual fashion, and who must be regarded as about to offer a libation to the divinity.

¹ *P. of M.*, i, p. 708, and Fig. 532. It was there reproduced from an unsatisfactory impression, and wrongly described as of 'agate'. It is now included among the treasures of the Museum founded by Mr. A. E.

Benaki at Athens. Thanks to his kindness, Monsieur Gilliéron, fils, was able to execute his drawing reproduced in Fig. 391.

² *Op. cit.*, iii, p. 268 seqq., and see Fig. 181.



FIG. 391 bis. WHITE AGATE LENTOID FROM SITE OF KYDONIA. YOUTHFUL GOD LAYING HANDS ON LION SUPPORTERS. (See p. 466.)

IV**



FIG. 392. YOUTHFUL MALE GOD ABOVE SACRAL HORNS BETWEEN WINGED GOAT AND MINOAN GENIUS.

§ 104. FRESH DISCOVERY OF A CHRYSSELEPHANTINE IMAGE OF BOY-GOD :
THE MINOAN TONSURE AND EVIDENCES OF HAIR-OFFERING.

New Chryselephantine figure of boy-God; Comparison with earlier discovered example; Of somewhat maturer age; Gold plates of loin clothing—parallel to those of 'Goddess of Sports'; 'Proto-Armenoid' physiognomy; Shorn head—evidence of tonsure; Biretta worn; Primitive custom of hair-offerings—hair source of life and strength; Cutting off of 'Childhood's locks' at Age of Puberty; Hair-offerings to Syrian Goddess; Dedications of locks of hair in Temple of Carian Zeus Panamareos; Cretan connexions of his Cult—a God of the Double Axe; Sculptural representations of votive tresses—Thessalian stela; Evidence of votive representations of hair-offerings in Minoan Shrines; Plaited steatite tresses used as affixes at Knossos and Mycenae; Ex voto of this kind found in relation to Palace Sanctuary of Domestic Quarter; Rite of tonsure as seen on the chryselephantine image associated with Youthful God.

New
Chrysele-
phantine
figure of
boy-God.

To the examples given in the preceding Section of the Minoan Genii as Ministers and Protectors of a young male divinity may now be added a new and remarkable piece of evidence as to the character of the God himself under an adolescent aspect. As interpreted below, it throws at the same time a suggestive light on the ritual usage of hair-offering connected with the entry on the stage of puberty.

A happy chance has made it possible to illustrate a fresh specimen of a youthful chryselephantine figure, the gold raiment of which throws a new light on that of the little boy-God already described and here reproduced in Fig. 393, similarly clad.¹ Like the image of 'Our Lady of the Sports',² this specimen too had crossed the Atlantic, but in this case it has re-crossed it and it has thus been made possible for me to illustrate this interesting and, beyond all doubt, genuine object, in detail in the present work. All that can with certainty be said about its provenance is that it was found some years since in the Southernmost region of Crete (Fig. 394, *a, b, c* and 396). Suppl. Pl. LIII shows the left side view of the figure enlarged to nearly one-half.

The scale of this figurine is somewhat less than that of the boy-God shown in Fig. 393, its height being 12.5 centimetres (4½ inches) in place of about 13 cm.³ To the actual height of the figure, which in this case stands

¹ *P. of M.*, iii, p. 442 seqq., and Figs. 309, 314.

² See above, p. 29, Fig. 14.

³ As calculated, *loc. cit.*, without the tiara and assuming that the feet were set flat instead of on tiptoe.



FIG. 393. *a*, SIDE VIEW OF THE ORIGINAL IVORY (CHRYSELEPHANTINE) FIGURINE OF BOY-GOD: DETACHED ARM OMITTED. (1.4 CM. OVER NATURAL HEIGHT.) *b* AND *c*, FRONT AND BACK VIEW (FROM FACSIMILE) WITH GOLD PLATING OF LOIN-CLOTHING AND DIADEM ADDED ON THE ANALOGY OF NEWLY DISCOVERED FIGURINE (see p. 470, FIG. 394).



a *b* *c*
 FIG. 394 *a, b, c.* IVORY FIGURINE OF YOUTHFUL GOD WITH LOINCLOTHING IN THE FORM OF
 GOLD PLATES (1 CM. OVER NATURAL HEIGHT).

flat-footed instead of on tiptoe, must in both cases be added the base—here a truncated wedge, traversed laterally by a perforation (see Fig. 394, *a*).

Only one arm was preserved, of which the attachment is broken away, and the outer margin of the right leg is wanting from the hip to a little below the knee, while the toes are deficient. Otherwise, except for a slight flaking away of the lower bridge of the nose, the figure is quite perfect. The surface of the ivory is for the most part dark brown in its present state—possibly owing to contact with the decayed wood of a casket—and this led the original owner to suppose that the actual material was wood.

Although there is really only half a centimetre difference in the actual height, the size of the earlier published boy-God—placed here for comparison (Fig. 393)—has the appearance of being considerably larger. This, apart from the tiara, was about 13 centimetres from the heel to the crown of the head, while the new statuette is 12.5 cm. But the proportions of the body in the case of the former figure were distinctly larger. The girth round the loins of the present specimen when perfect was about 6 centimetres, that of the

Comparison with earlier discovered figure.

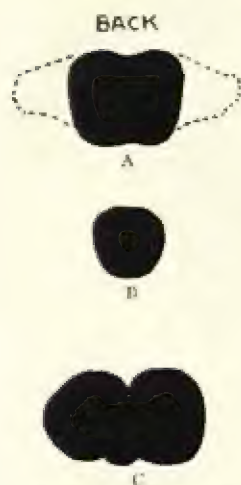


FIG. 395. SECTION OF NEW IVORY FIGURE; *a*, THROUGH CHEST; *b*, WAIST; *c*, THROUGH BUTTOCKS ($\frac{1}{2}$).

other 8.4. The greater bulk in the latter case seems to be mainly due to the attempt to reproduce the fuller forms of childhood. In the present instance we have the more compact figure of a youth of about the age of puberty.

Three sections are here given in Fig. 395. *A*, round the chest, where the diameter—21 millimetres under the arm-pits—contrasts with 24 in the case of the former figurine. *B*, the waist, where the horizontal diameter is 13 mm. compared with 12 mm. in the other. *C*, round the buttocks, the diameter being 21 millimetres, not much more than two-thirds of that—29 mm.—attained by the boy-God, Fig. 393.

The muscles of the stripling that we have here before us, are firmer, especially those of the back (see Fig. 396). The harder set features and shorter hair must also be taken to indicate a youthful personage somewhat more advanced in years than the boy-God already illustrated.

Of somewhat maturer age.

Views of the image, without its gold plate and giving a better idea of the physical forms and drapery, are given in Fig. 396 and Suppl. Pl. LIII *b*, *c*. It will be seen that it is the embodiment of a boy about to reach the stage of puberty, rather than of one but little beyond the borders of infancy. Its back, enlarged by a third in Fig. 396, gives a good idea of the shapely forms.

Yet the evidence of the gold loin-clothing, which in this instance has been preserved, excludes the idea of the boy here modelled having yet fully entered the Minoan man's estate. The characteristic 'Libyan sheath'¹ was clearly not worn. Indeed, it looks as if the raiment here used, represented by two pieces of gold plating for front and back, was much the same as that which had originally covered the same parts of the body in the case of the younger figure and of which, in that case, we have the evidence in a central pin-hole in the small of the back and two others above the hips.

On the evidence now before us the original loin-clothing of the latter is restored in gold plating in Fig. 393, *b, c* above, the diadem being also shown.

Gold-plates of Loin-clothing : Parallel to Garb of 'Goddess of Sports'.

Gold plates of loin-clothing : parallel to 'Goddess of Sports'.

In the case of the boy-God described in the previous Volume the gold-plates that had originally clothed the waist and loins had disappeared. But an instance of a nude ivory image elaborately attired in thin gold plating has been given above² in the case of the 'Goddess of the Sports', who, as will be seen, combined a female corset with the belt and adult male clothing, including the *penistache*, of a Minoan *tanreador*.

The plating of the girdle has been lost in the present case, as well as the cap that seems once to have covered the crown and back of the head.

¹ See above, p. 23, Fig. 12. ² See p. 29, Fig. 14.



FIG. 396. BACK VIEW OF IVORY FIGURE WITHOUT THE GOLD LOIN PLATES ($\frac{2}{3}$).

The two gold loin-coverings, however, are well preserved, and are reproduced in Fig. 397, *a, b*, showing pin-holes in each of their upper corners. These, no doubt, corresponded with the two small holes visible in the ivory just above the hips on either side, the same pin serving for the corners of the front and back raiment. The companion figure of the younger boy, already described, has two small holes in the same positions above

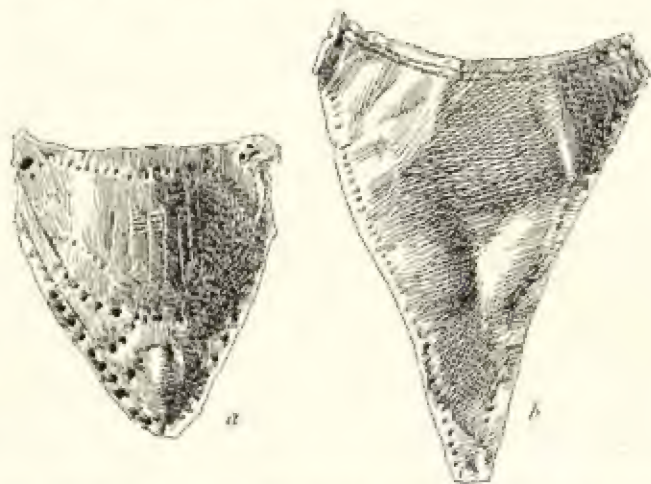


FIG. 397 *a, b*. FRONT AND BACK LOIN-PLATES OF YOUTHFUL IVORY FIGURE.

the hips, besides another behind on the same level in the small of the back. It is clear therefore that gold plates of the same kind had been attached to it in a similar way. Both images are provided with another rivet-hole behind, in the hollow formed in the belt, which would have been originally covered with a band of gold plate in like fashion.

In the case of the present figure, the taper end of the back plate (*b*) below may be taken to indicate that this corner of the article of apparel that it represents was drawn between the legs, perhaps by means of an attached string or tape tied to another at the lower corner of the front piece. The good reproduction of the body contours by the gold plates may be taken as evidence that the cloths themselves were drawn tight over the groin and buttocks. The plates show a slight decoration of dots and lines.



FIG. 398. HEAD OF IVORY FIGURE.

Physical Characteristics : 'Proto-Armenoid' Profile.

As already noticed, however, the features of the face and cut of the hair visible in the new figure mark a more mature age than the other,

though the character of the loin covering still shows that the personage here represented had not altogether reached the adult stage.

'Proto-Armenoid' physiognomy.

The mouth is small and well-shaped and the eyelids are slightly rendered as a narrow border above and below the eye-balls. The outer ridge of the lower part of the nose has been unfortunately flaked off, but what remains suggests, in spite of the general boyish features, an original profile presenting marked signs of aquilinity. (See Fig. 398.)

The character of the profile, indeed, has a great interest as in keeping with the 'proto-Armenoid' type so visibly reflected in the Middle Minoan seal impression already referred to, Fig. 399.¹ We have here a prince representing what seems then to have been the dominant ethnic element in the Island. His nose contrasts with the less accentuated forms more usually portrayed in Late Minoan Art, as for instance, in the Cup-bearer fresco. But the young God was still figured in the likeness of this old ruling race of Anatolian kinship. So, too, we have seen that the Héraklès-like champion of the bull-ring, who, as shown on a seal-type, Fig. 400, bears on his shoulders a mighty beast, shows the same highly accentuated profile.² This, indeed, is quite in accordance with the evidence that the Sports of the Minoan arena came from the same Anatolian side.

The more tender years of the little boy-God previously described might well preclude the appearance of such features. In that case the nose is distinctly 'tip-tilted' (Fig. 393, *a*).



FIG. 399. SEAL IMPRESSION FROM HEIROGLYPHIC DEPOSIT.



FIG. 400. CHAMPION TAUREADOR SUPPORTING BULL: GREEN JASPER LENTOID, MYCENAE.

¹ See *P. of M.*, i, p. 8, Fig. 2 and p. 272, Fig. 201, *a*.

² Cf. *P. of M.*, iii, pp. 230, 231, and Fig. 164 *A*.

Evidence of Tonsure.

But an even greater contrast is presented by the hair. While that of the younger figure falls down in undulating tresses, not only is the hair

Shorn head—evidence of ritual tonsure.



FIG. 401. BACK OF HEAD OF FIGURE SHOWING TONSURE (2).

here cut short before and behind, but—as will be seen from the enlarged photograph reproduced in Fig. 401—it has been completely shorn off over the whole crown and part of the back of the head. The place of the tiara was in this case clearly supplied by a *biretta*—originally, doubtless, a small cap of thin gold plate like those about the loins—which had covered the crown of the head. A side view of this gold covering, which from the appearance of the ivory seems to have been slightly rolled in front, is restored in Fig. 402.



FIG. 402. SIDE VIEW OF BIRETTA, RESTORED (1).

The wearing of the *biretta* to cover the bald patch of the tonsure was in fact a natural consequence and corresponds with a similar usage in the Roman Church. The alternation in these two chryselephantine images—the religious character of which may in both cases be assumed—of the tiara and the *biretta* suggests an interesting reflection. Have we not here in truth a much more ancient parallel to the contrast visible between the public and private head-gear of the Roman Pontiff himself? From the early Middle Ages onwards the *biretum*—in that case of linen—was included, like the triple 'mitra', among the pontifical insignia¹ and was worn by bishops and abbots as a sign of investiture.

Biretta worn.

Widespread Primitive Custom of Hair-offering.

It must be inferred that we have here to do with the custom of the ceremonial cutting and dedication of the hair of which so many evidences

¹ See Du Cange, *s. v.* He cites a bulla of Boniface VIII presenting an ecclesiastical benefice 'illudque eidem Thomae contulimus

ac nos de ipso per nostrum birretum prae-sentialiter investimus.' It was also adopted by academic doctors.

Primitive custom of hair-offering: hair source of life and strength.

are still to be found among primitive races the World over.¹ The hair is regarded by them as a main source of life and strength. So much, indeed, is this the case that its cutting off was very generally accepted as a substitute for human sacrifice,² an idea humorously played on by Ovid³ in his imaginary conversation between King Numa and Jupiter. The God, consulted as to the propitiation necessary to avert his thunderbolts, demands the cutting off of the head of a man, on which the King—after a preliminary attempt to whittle down ‘head’ to that of an onion—would make Jupiter content himself with the top hair.⁴ According to primitive ideas the hair of the crown of the head was in a special way connected with human life.⁵ In general the hair was a supreme personal offering in the case of the living and a potent means of placing the person of the votary in the hands of the divinity both in life and death.

The hair regarded as the source of bodily strength is well brought out in the biblical episode of Samson and Delilah.⁶

Besides death, the chief occasions for these ceremonial hair-cuttings were after birth, on embarking on some special enterprise or on its successful result, and, as here, on entering on the adult stage, in the case of both sexes.

Such hair-offerings were often made to springs and rivers as the most visible embodiment of the divine life inherent in the Earth. The Arabs, like the Hebrews,⁷ offer them at springs. With the ancient Greeks, as is well known, the long hair of childhood was dedicated to a whole series of local river-Gods. So we read that Achilles’ golden locks had been vowed by his father to the Spercheios, though destiny led the hero himself to fulfil the vow at the pyre of Patroklos, where he laid them in his beloved

¹ See on this, especially G. A. Wilken, *Das Haaropfer* (in his *Verspreide Geschriften*, Pt. III (1912), p. 401 seqq.), and his monograph *Ueber das Haaropfer und einige andere Trauergebräuche bei den Völkern Indonesiens*, Heft ii, Amsterdam, 1887.

² Tylor, *Primitive Culture*, ii, p. 399 seqq., and cf. Krause, *Die Ablosung der Menschenopfer*, p. 77.

³ *Fasti*, iii, 339 seqq.; the story is more literally given by Plutarch (*Numa*, xv).

⁴ ‘Summos, ait ille, capillos’.

⁵ The Tibetans think that the soul issues

from the top of the head, and that the cutting off of the hair there facilitated its escape on death. So, too, the Kānikārs, a mountain tribe of Travancore, cut off the top-knot of the deceased (see Frazer, *Burial Customs*, p. 83, note).

⁶ See, too, Wilken, *loc. cit.*, and *De Simsonsage* (*Gids*, 1888, No. 5), and cf. Robertson Smith, *The Religion of the Semites*, p. 324, and n. 2.

⁷ Ephraem Syrus (*Op. Syr.*, i, 246), commenting on Lev. xix. 27. Cf. Robertson Smith, *op. cit.*, p. 325, note 1.

comrade's hands.¹ So, too, Orestes, as Aeschylus tells us,² offered at the same time his 'childhood's lock', and another, of mourning, to the river of Argos. In modern Greek folk-lore, Charos, who keeps in memory the old ferryman of Styx, still claims a fore-lock of the departed.³

Votive gifts of locks of hair were made to various divinities.⁴ They were very generally offered by girls before marriage, to Hera Teleia, Artemis, and the Fates. In Paros a series of dedications have been found in the name of children and youths whose hair was offered at the age of puberty to Asklepios and Hygieia,⁵ while at Titanê, near Sikyon, Pausanias was shown a cult statue of the latter Goddess so covered with women's hair-offerings that it could not be easily seen.⁶ Like dedications are recorded to Poseidôn and Dionysos, to Nymphs and Heroes, and over the graves of the Hyperborean Maidens at Delos. But of most abiding record in the memory of mankind were the tresses dedicated by Queen Berenice, in the temple of the Zephyrian Aphroditê, for her husband's safe return from his Assyrian expedition, which later—found to be missing in the temple itself—were rediscovered in the sky as the constellation 'Coma Berenices'.

At Delphi, where the early cult was so closely connected with that of Minoan Knossos,⁷ it was customary for boys about to enter on the estate of manhood to have the forepart of their hair cut off at the spot where Theseus was said to have practised the same rite. This form of tonsure was thence known as the *theseis*.⁸

It does not appear whether the *theseis* involved the actual shaving bare of the hair at the front of the head, or whether it simply meant the cutting of front locks. In the case of the ivory figure the tonsure was accompanied by a cutting off of the 'childhood's locks', both on the front and the back of the head. This is clearly seen from a comparison with the hair of the younger boy-God as shown in Fig. 393.

Cutting off of 'Childhood's locks' at age of puberty: the *theseis* at Delphi.

¹ *Iliad* xxiii. 141 seqq.:

στὰς ἀπάνευθε πρυῆς ξανθὴν ἀπεκείρατο
χαίτην
τὴν βα Σπερχιεῦ ποταμῷ τρέφε τηλεβόωσαν
. . . ἐν χερσὶ κόμην ἐτάρατο φίλοιο
θῆκεν, τοῖσι δὲ πᾶσι ἐφ' ἥμερον ὥρσε
γούνο.

² *Choeph.* 6, 7. This is referred to there as πλόκαμον θρεπτήριον, the other lock as πενθητήριον.

³ Schmidt, *Volksleben der Neugriechen*, p. 230.

⁴ For the classical examples, see especially

Gaston Deschamps and Georges Cousin, *Bull. de Carr. Arch.*, xii (1888), p. 481 seqq., and cf. Frazer, *Pausanias*, iii, pp. 279-81.

⁵ E.g., *C. I. G.* 2392 ἐπὶ τοῦ παιδίου Ἐπαφροδίτου τὴν παιδικὴν τρέχα Ὑγίᾳ Ἀσκληπιῷ.

⁶ Paus. ii. 11.

⁷ See *P. of M.*, ii, Pt. II, pp. 840, 841.

⁸ Plutarch, *Theseus*, c. 5 ἐκείρατο δὲ τῆς κεφαλῆς τὰ πρόσθεν μόνον, ὥσπερ Ὀμηρος ἔφη τοὺς Ἀβαντας. The explanation there given of cutting off the forepart of the hair was that in hand-to-hand fighting the adversary might not be able to seize the forelock.

Hair-offerings
to Syrian
Goddess.

In view of the fundamental affinities of pre-Hellenic Crete with the Syro-Anatolian cultural and religious sphere, it is also interesting to observe that hair-offerings of the special kind with which we are here concerned were a regular feature in the worship of the Syrian Goddess. Lucian records that before marriage both youths and girls made hair-offerings—already dedicated from their birth—the first growth of the chins being included in the first case. These were placed in gold and silver receptacles, inscribed with the dedicator's name, and nailed up on the temple walls. Lucian had done so himself as a youth, and a lock of his hair was thus preserved in the temple at the time when he wrote his treatise on the Goddess.¹

Hair-offering in Temple of Zeus Panamaros: Cretan Affinities of Cult.

Dedications of
locks of hair in
Temple of Carian
Zeus Panamaros.

But the 'proto-Armenoid' and old Anatolian type recognized in the physiognomy of the little tonsured figure before us brings it into an even closer connexion with the evidence, lately forthcoming, of similar ceremonial dedication of the hair in a sanctuary of the Mainland region to the East, with which Crete stood in such close primeval relationship.

In the Temple of Zeus Panamaros at Panamara, near the flourishing Greek foundation of Stratonikeia, in Caria, the French explorers have in recent years brought to light a series of inscriptions recording such hair-offerings.² The votaries are in all cases male, and the occasions vary, but the mention of boys or children in several cases makes it reasonable to suppose that dedications of 'childhood's locks' on arriving at the age of puberty were here included. The locks of hair were generally deposited³ in oblong cavities cut in small *stelae*, and with a ledge at either end, so that it could be covered over by a small marble slab.⁴ Inscriptions were cut on

¹ Lucian, *De Syria Dea*, c. 60. In the case of the hair-offerings of the youths in the Hierapolis temple, he writes in one passage of the incipient beard only, but speaks nevertheless of his own offering as a 'lock' (πλόκαμος). In his mention of the Troezenians, however, he speaks generally of their maidens and youths 'cutting their hair in honour of Hippolytos'. In c. 55 he mentions the fact that when a man first visits the sanctuary 'he shaves his head and eyebrows'. We may conclude that the youths referred to cut the hair of their heads as well as the nascent

beard on their chin. His statement that the Troezenians 'alone among the Greeks' had this practice is, of course, as Frazer (*Pausanias*, iii, p. 280) points out, erroneous, since similar usages are recorded of many Hellenic cities.

² Gaston Deschamps et Georges Cousin, *Bull. de Corr. Arch.*, xi (1887), pp. 235-89, 373-97; xii (1888), pp. 82-104, 249-73, 479-90 (*La Consécration de la Chevelure*).

³ At times, the very poor cut mere holes in the wall.

⁴ See the illustration, *op. cit.*, xii, p. 480.

the blocks dedicating the hair to Zeus Panamaros, often coupled with his Consort, described as 'Hera Teleia'.

The cult is here seen in a very late, Grecized form, the God himself on the contemporary imperial coinage of the neighbouring Stratonikeia being converted into a riding figure with the usual *chlamys*. But the characteristic elements of Panamaros—as of Panamara, the sanctuary site itself—recur in the personal name *Παναμύης*, so widely diffused among the Carians and their kin. It is found as far East as the foot of the Amanos, in the Kingdom of Sam'al, where, at Sendjirli, the name Panammû is attached to late Hittite dynasts.¹ A curious link with the traditions of the old Cretan Religion is found in its reappearance, under the form Panamoros—together with Labraundos—as a name of one of the Kouretes, who had gone over to Caria in fulfilment of an oracle.²

Cretan
con-
nexions of
Cult.

The God of these dedications, frequently referred to in general terms as the 'Carian Zeus', is, in fact, a local impersonation of the kindred divinity, Zeus Labraundos, whose symbol is the *labrys*, or Double Axe. The chief Carian God appears regularly on the early coins of the Satrapal period, holding the sacred weapon. The divine pair of the Panamara sanctuary must, in fact, be regarded as of direct descent from that of the earlier Anatolian religious phase, where the Goddess still claimed precedence, and of which we find the tradition in the worship of Kybelê and Attis and their equivalents. This Goddess and her youthful satellite themselves find their prototypes on Hittite monuments.³

It is of special interest to note, as confirming the Minoan relations of the cult of Zeus Panamaros and of the hair-offerings dedicated to him, that in one case at least, above the square cavity in the stela where the lock was formerly enclosed, the Double Axe symbol had been incised.⁴ The inscription records the hair-offerings of two brothers, one of whom, by a suggestive coincidence, bears the name of Daidalios.⁵

God of
Double
Axe.

¹ This was first pointed out by C. J. Ball, *Proc. Soc. Bibl. Arch.*, x (1888), p. 432; see, too, Kretschmer, *Eint. in d. Gesch. d. griechischen Sprache*, pp. 379, 398. For Panammû see Sachau, *Ausgrabungen in Sendjirli*, i, p. 56 seqq.

² *Et. Magn. s.v.* Εὔβορος (the river near Tralles beside which the Kouretes slept).

³ Hans Oppermann in his *Zeus Panamaros* (Giessen, 1924), containing a useful summary of the material, has rightly pointed out (pp. 89, 90) the essential correspondence of the

Carian God and his consort with the earlier divine pair of Asia Minor as seen on the Hittite monuments.

⁴ P. Foucart, *B. C. H.*, xiv (1890), p. 371. The dedication—[ΔΙΙ] ΠΑΝΗΜΕΡΙΩ—here shows a misinterpreted form of the name. A priestess, Aurelia Magnes, is in this case mentioned as well as a priest.

⁵ ΔΑΙΔΑΛΙΟΥ ΚΑΙ ΤΡΥΠΑΝΙΟΥ ΤΩΝ ΑΔΕΛΦΩΝ ΑΙ ΥΠΕΡ ΕΥΧΗΣ ΚΟΜΑΙ ΕΥΤΥΧΩΣ.

Steatite *Ex Votos* in the form of plaited locks from Knossian Shrine and Mycenae.

Sculptural
representations of
votive
tresses:
Thessa-
lian
stela.

There is evidence that in Greece such ceremonial dedications were recorded also in a glyptic shape. Pausanias relates that on the bank



FIG. 403. VOTIVE MONUMENT WITH PLAITED LOCKS OF BOYS DEDICATED TO POSEIDŌN: THESSALIAN THEBES.

of the Kephisos there was a statue of a youth shearing his hair to offer to the stream, just as Peleus had vowed to offer to the Spercheios those of his son Achilles should he return from Troy.¹ On the other hand, a votive monument, the front of which is cut to represent a shrine (*aedicula*), found on the site of the Thessalian Thebes, displays in relief two long, elaborately plaited locks of boys offered by their father on their behalf to Poseidōn (Fig. 403).²

¹ Paus. i, 37, 3, and cf. *II*. xxiii. 141 seqq.

² In the British Museum (*Catalogue of Sculptures*, i, 98). Cf. Millingen, *Ancient Unedited Monuments*, Series 2, Pl. XVI, 2,

and p. 32, who compares the Epigram, *Anth. Gr.* vi, c. 21, Ep. 1; Potter, *Archaeologia Graeca*, iii, c. 20. It is possible that in this case the occasion of the boys' hair-offering

Apart even from such comparative illustrations there is what will probably be accepted as conclusive evidence of the practice of setting up similar *ex votos* for hair-offerings in Minoan shrines. In describing the

Evidence of votive representations of hair-offerings in Minoan Shrines.

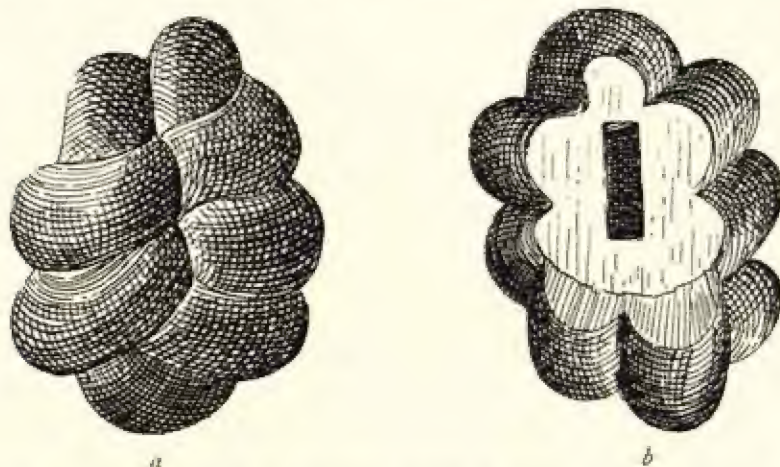


FIG. 404 *a, b*. VOTIVE AFFIX OF PLAITED LOCKS IN STEATITE: IN SANCTUARY DEPOSIT OF DOMESTIC QUARTER, KNOSSOS.

discovery of the remains of the 'Hathoric' side-locks, cut out of dark steatite, and unquestionably belonging to a Sphinx's head,¹ found in a Deposit of the 'Domestic Quarter' of Knossos, another fragmentary piece was referred to, fitting on to these, which showed part of a plaited end. This had been fastened to the lock on the right-hand side by means of a rivet, the perforation for which was visible. The occurrence of this fragment had led me, in describing these remains, to attribute to the same figure another relief in similar material brought to light in the same area² (Fig. 404, *a, b*).

This conclusion, however, cannot be maintained. The specimen referred to is complete in itself, with a flat base that had been fastened by means of an oblong slit to another flat surface (Fig. 404, *b*). The plait-work formed itself a continuous oval and had no connexion with any other object. In other words, we have here what can only have been a model of a compactly plaited lock of hair, affixed for votive purposes to the wall of some sanctuary.

Plaited Steatite tresses from Knossos and Mycenae.

was their starting on a voyage. Fig. 403 is reproduced from a photograph kindly supplied by the Keeper of Greek and Roman Antiquities, Mr. E. J. Forsdyke. This relief is also illustrated in the article *Coma* of

Dar. et Sagl. by Messrs. E. Pottier, Maurice Albert, and E. Saglio.

¹ *P. of M.*, iii, p. 419 seqq.

² *Ibid.*, p. 422, Fig. 289.

Affix of
plaited
locks from
'Treasury
Deposit'.

The 'Treasury' deposit, in which this plaitwork affix was found, itself contained a whole series of relics derived from a shrine of the Minoan Goddess that had existed in this Palace region. Amongst these, in addi-

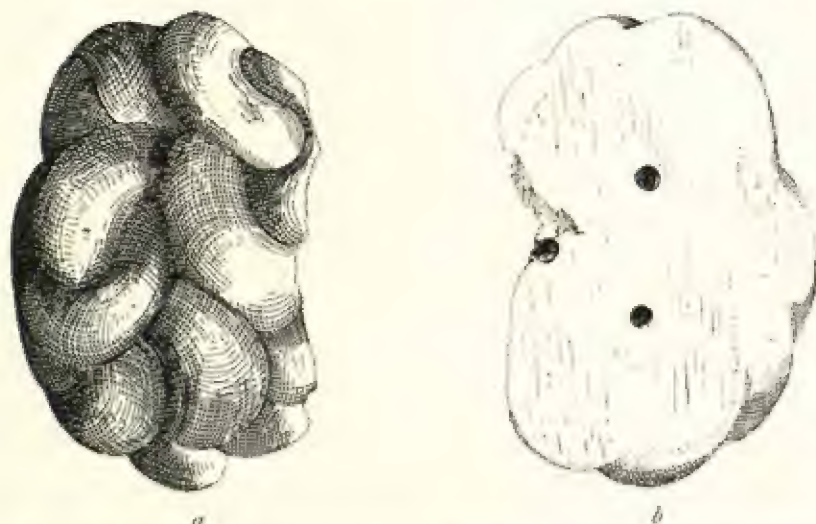


FIG. 405 *a, b*. VOTIVE AFFIX OF PLAITED LOCKS IN STRATIITE; MYCENAE.

tion to the Hathoric side-locks of a Sphinx above mentioned, was part of the ivory wing of another, two small bronze Double Axes, gold plated, and part of a 'Miniature' fresco depicting the façade of a sanctuary on which the sacred symbol was repeated.

Another
from
Mycenae.

The conclusion that the relic in fact belonged to a distinct offertory class of this kind receives moreover an interesting confirmation from the occurrence at Mycenae of another similar relic cut out of the same soft stone, with a triple plait-work, slightly fractured on one side (Fig. 405).¹ The base of this is also flat, in this case with three round rivet-holes for its attachment.

It looks as if it had been a widespread custom to fix up *ex votos* of this kind, representing plaited locks of human hair, on the walls of Minoan sanctuaries. In other words the votive usage that survived in the sanctuary of the Carian God of the *Labrys* had been associated at a much earlier date with the great Cretan Goddess.

Found at
Knossos
in relation
to Palace
Sanctuary.

As to the character of the worship itself, we have sufficient evidence in the little gold-plated Double Axes, and the fragment of painted stucco, showing part of the frieze of that cult in miniature, as well as

¹ *P. of M.*, iii, Suppl. Pl. XXXVII, A.

in the remains of the steatite and ivory Sphinx. Whether or not—as there are some reasons for suspecting—the ‘Boston Goddess’ and figurine of the ivory boy-God, so closely akin to it, were derived from the same deposit, the votive reliefs of hair-offerings that it contained must be clearly brought into the same religious association. Here, too, as was the case of the actual hair-offerings in the Sanctuary of the Carian Zeus at Panamara, their votive equivalents are associated with the Cult of the Double Axe.

It seems, moreover, reasonable to suppose that the chryselephantine image of the youth before us should itself be taken to represent the offspring of the Goddess herself rather than any mortal personage. The ritual tonsure and votive hair-offerings of boys on approaching mature years can be equally assumed in the case of the adolescent divinity.

In this little gold and ivory figure we may once more be allowed to recognize a boy-God, slightly older than the other, but standing in the same, probably filial, relation to the Minoan Goddess. More than one youthful personage of about the same age is seen in attendance on her, such as the young warrior who stands before the seated Goddess on the Mycenae ring,¹ or the boy ministrants who pull down for her a branch of the sacred tree or proffer a flask with its juice, as on the ‘Ring of Minos’.² In these figures, hardly to be interpreted as any kind of Consort, as in that before us, we may well—in a more advanced and serviceable stage of his boyish career—recognize the child who, under a still more infantile aspect, is otherwise seen on the lap of the Mother Goddess.³

¹ See *P. of M.*, iii, p. 464, Fig. 324.

² See below, pp. 948, 949.

³ *P. of M.*, iii, p. 469, Fig. 327: painted

clay image, Mavro Spelio, and p. 471, Fig. 328, Thistê ring.

Rite of
tonsure
here asso-
ciated
with
youthful
God.

§ 105. RETROSPECT OF MINOAN BEAD-SEALS AND SIGNET-RINGS: TYPICAL FORMS AND SELECT ILLUSTRATIONS.

Primitive bead-seals of ivory and soapstone; M. M. III and Transitional phase illustrated by hoards of sealings; Similar deposits at close of palatial period at Knossos; Early Nilotic sculptural influences—proto-dynastic ivories imitated in a more natural manner; Sculptured style common to stone vases and seals—Owl type; Middle Minoan seal-types on hard stones, &c.—hieroglyphic prisms; 'Signet' seals and those with foreparts of lions; Disuse of hieroglyphic seal types at close of M. M. II; Appearance of portraiture, naturalistic animals, and rock scenery; Flat-sided disks—precursors of lentoid type; Lentoids in vogue by M. M. III—the Zakro seal impressions; Lentoid types: flying bird, calf's head, and instantaneous sketch of three water-fowl; Nilotic suggestions of water-fowl motives—later versions contrasted; A typical lentoid bead-seal; Predominance of lentoid type from close of L. M. Ib; Almond-shaped or 'amygdaloid' bead-seals; Transitional M. M. III—L. M. Ia examples; Perspective view of fish; 'Talismanic' designs; 'Elongated' amygdaloid bead-seals, their L. M. Ib-II date; Cylinder form—Early Aegean adaptation of Oriental type; Actual import of Babylonian cylinders in M. M. Ia; but shape first copied in L. M. Ia; Haematite specimen from H. Pelagia, with design of original Minoan composition; Reaction of Syro-Hittite motives; 'Cypro-Minoan' class; Minotaur on cylinder from harbour-town of Knossos; 'Flattened cylinder' type—M. M. Ia prototype from Platanos; M. M. II examples; Gold-plated specimen from Palaikastro; Gold beads of this form with finely executed intaglios; Agate bead showing bull caught at cistern; Chalcedony bead with tumblers, from Knossos—their Libyan plumes; Tumbling figures on early Nilotic cylinders, &c.; Compared with Minoan; Minoan tumbling in bull sports; Egyptian female acrobats; Male tumblers of Iliad; Goat and dog on flat cylinder—an illustration of Fable; Gold Signet-rings—evolved from Early Minoan bead-seals; Dramatic religious episodes presented by them; Occasional scenes of combat; 'Elongated' gold bead-seals from Thissê tomb; Oedipus with Sphinx and with Laios; Slaughter of Aegisthos and Klytemnestra by Orestes; Historical records at the hands of Minoan artists.

Primitive
bead-seals
of ivory
and soap-
stone.

SOMETHING has been said in these Volumes of the early class of Minoan bead-seals in ivory and soapstone, as well as of the succeeding styles in which harder materials were attacked. On these, the primitive pictographic

figures developed, not only into the finely cut hieroglyphic signs, but, from the second Middle Minoan Period onwards were transformed into intaglio types of the highest naturalistic and artistic merit.

Of the sphragistic style of the great transitional Age that links the closing Middle Minoan phase with the earliest Late Minoan collective records have been preserved in the great hoards of clay seal impressions from Zakro and Hagia Triada and at Knossos itself in those of the Temple Repositories. Some salient points regarding these have already been brought out and many of the gems themselves and of the gold signet-rings that now come into prominence have received illustration in the course of the preceding Sections of this Work.

M. M. III and 'Transitional phase' illustrated by hoards of sealings.

The next great landmark is afforded by some considerable hoards of clay seal impressions, more particularly referred to below, that mark the closing Palatial Age of Knossos, and which owe their interment to the final catastrophe. But to understand the somewhat conventionalized stage there reached it is necessary to take a general survey of the intermediate examples of the gem-engraver's Art that enable us to carry back its history to the days of its greatest achievements.¹

Similar deposits of close of Palatial Period at Knossos.

A rough chronological guide to the date of individual seal-stones is often supplied by their form and material. In the more primitive Age the use, for instance, of soft and easily worked substances, such as soapstone and ivory, inspired the craftsmen to carve the upper part of the seals in a great variety of animal reliefs.

E. M. designs in relief.

¹ In attempting, for the first time, a summary classification of Minoan bead-seals and signets of the Middle and first two Late Minoan phases, I have been largely aided by my own Collection, which consists of over 200 selected specimens. It has been the result of a quest for this material, extending now over forty years, and it may at least be claimed to be more continuously representative of the various stages than any other collection, either public or private. The nucleus was formed in the years from 1894 onwards, devoted by me to the archaeological exploration of the Centre and East of the Island. Its formation was greatly assisted by the practice of the Cretan housewives in the villages of wearing Minoan bead-seals as 'milk stones', for which, however, they were willing to accept substitutes. In 1893 I had already been able to acquire at

Athens a certain number of early stones (some of them presenting hieroglyphs) obtained from Crete by an antiquary there, and in the following year the series had been greatly added to by the acquisition, from a native proprietor, who had land on and near the site of Knossos, of a small local collection of great interest, including a gold signet-ring. At the same time I secured in a similar manner a batch of specimens from the Siteia Province in the extreme East of the Island. In later years my series received important additions through exchange (for Cretan coins) with the late Mr. R. B. Seager. Favourable circumstances also enabled me to add the Thisbê intaglios on gold beads and signet-rings, and—as the result of a special journey to the West of the Peloponnese—the 'Ring of Nestor'.

Nilotic Sculptural Influences on Early Minoan Crete.

Early
Nilotic
sculptural
influences.

The presence of abundant deposits of green and partly translucent soapstone in East Crete greatly promoted the development of this miniature sculptor's Art for this and like purposes. The ivory, also ready to hand, seems to have been due to the continued relations preserved throughout the Early Minoan Age with a kindred element beyond the Libyan Sea. To these works of the primitive lapidaries, rendered possible by the abundance of such materials, but also to the innate artistic genius of the race, we must trace the beginnings of the great plastic school of Middle Minoan Crete.

Nor can it be doubted that, together with the supply of the ivory material, sculptural models in the round had themselves found their way into the 'Mid-sea Land'. We may here, indeed, find the explanation of an interesting phenomenon. The Early Minoan craftsmen show distinctly greater advance in relief carving as compared with engraving, and the upper parts of their signets, rendered in relief, are superior to the intaglios below.

Proto-
dynastic
ivories
imitated.

The ivory lions on a flat base, inherited by the earliest dynastic Art of Egypt¹ from the late prehistoric and used as pieces in games (Fig. 406), supplied the model for the Early Minoan seal in the same material already illustrated (Fig. 407, *a, b*).² In this, indeed, we see the new element of the recumbent body of a man below, but the correspondence in details, such as the form of the base and the tail of the lion curling up the flank, affords absolute proof of the affiliation of proto-dynastic Egyptian models.

A similar origin may be claimed for the ivory seal types in the form of apes (Fig. 411), while certain pre-dynastic hawk amulets in glazed stone (Fig. 408), with a lateral perforation,³ suggest the similarly bored dove from Koumasa, that shelters its fledglings beneath its wings (Fig. 409). The lion form of seal—as is shown by the amethyst specimen, bored in the same way through its side, Fig. 416⁴—itself survived to the beginning of the 'hard-stone period' of the Minoan lapidaries (M. M. II). A remarkable link with this is supplied by the scaraboid-like lion-seal of steatite, with the same side perforation, Fig. 415, *a-d*, found at Knossos 1932. This presents below a finely engraved squatting figure in a markedly Egyptianizing style, holding a globular vase and coupled with a loop pattern of Early Minoan affinity.

¹ E.g., Petrie, *R. Tombs of Abydos*, Pt. ii, pl. VI, 23-8 and pl. VI A (1st Dyn).

² See *P. of M.*, ii, Pt. I, p. 55, Fig. 26. The oval, square-cut base is also reproduced, here engraved as for a seal.

³ Of 1st Dyn. date, from the Abydos Temple (Petrie, *Abydos*, Pt. ii, Pl. VII, 81, 82). It has

a side and front perforation.

⁴ *B.M. Cat. Engraved Gems, &c.*, p. 13, No. 103, with side view. The base is here for the first time published. Bought in 1892 from an Athens dealer. Said to be from 'Mycenae', but certainly of Cretan origin.

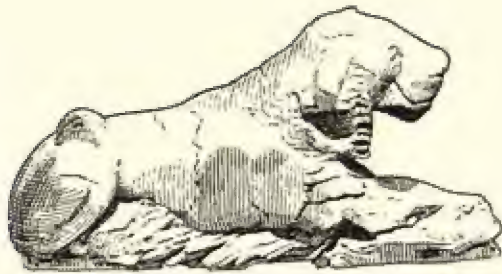


FIG. 406. IVORY DRAUGHT PIECE IN FORM OF LION. FIRST DYNASTY: ABYDOS, EGYPT.

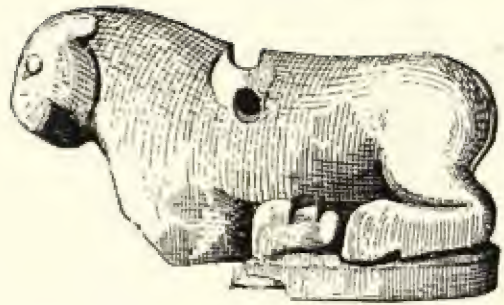


FIG. 407. IVORY LION-SEAL. PRIMITIVE THOLOS: 'KALATHIANA'. (3)



FIG. 408. HAWK PENDANT. GLAZED STONE: ABYDOS, DYN. I.

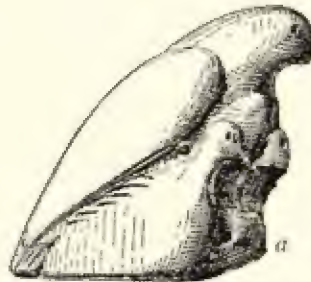


FIG. 409. IVORY DOVE, SHELTERING YOUNG. KOUMASA, CRETE.

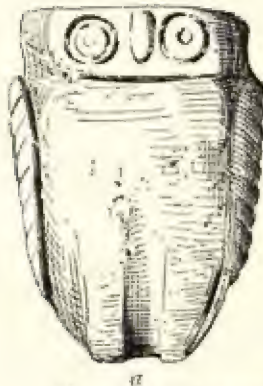


FIG. 410. BRECCIA VASE. EARLY MINOAN: MESARÀ, CRETE.

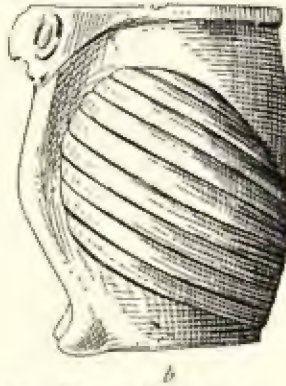


FIG. 410 bis. IVORY SEAL IN FORM OF OWL. MESARÀ, CRETE.



FIG. 412.
EGYPTIAN APE.

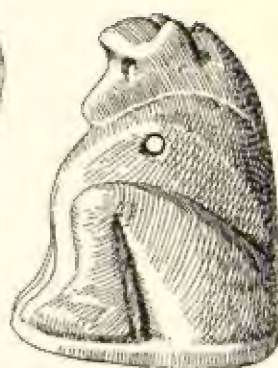


FIG. 411. IVORY SEAL IN FORM OF APE. PLATANOS, CRETE.

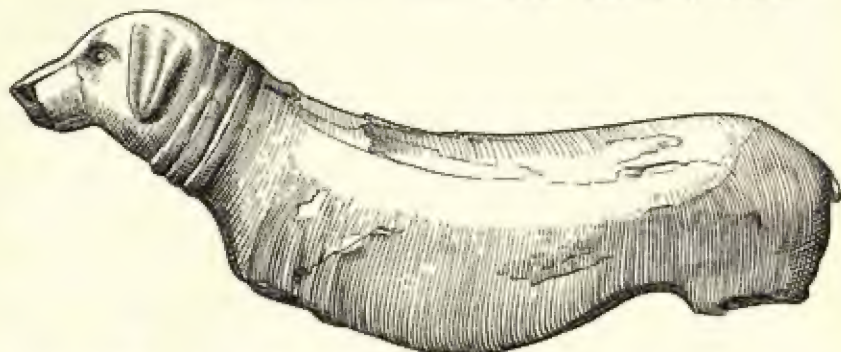
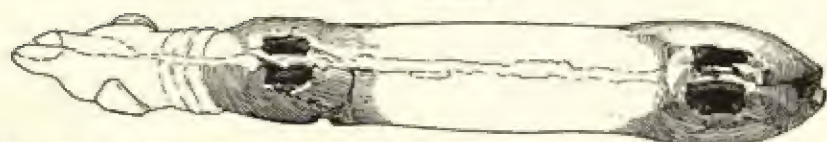


FIG. 413. *a*, IVORY DOG; *b*, BACK VIEW. HIERAKONPOLIS: EARLY NILOTIC.



a



b



c



d

FIG. 415.

STEATITE LION-
SEAL. KNOSSOS.



FIG. 414. DOG ON GREEN STEATITE LID FROM
MOCHLOS. EARLY MINOAN II



a



b

FIG. 416.

AMETHYST LION-
SEAL: M.M. II.

The conspicuous skill of the earlier Nilotic ivory carvers in portraying dogs (see Fig. 413, *a, b*¹) is reflected in the couchant dog so admirably executed in relief on the steatite lid from Mochlos (Fig. 414), where, however, its jackal affinities contrast with the nobler stock represented by the Hierakonpolis ivory. The latter and a parallel prick-eared type were adopted by historic Egypt—at times with Libyan names—and this breed appears on the M. M. II *a* seal illustrated below.² There, too, we recognize the bow and arrows of the Desert Race.

As demonstrating the identical style of the lapidaries who executed the reliefs on stone vases, and of those who carved the ivory seal-tops, it is possible here to supply two interesting examples. An Early Minoan breccia cup³ (Fig. 410, *a, b*), cut into the figure of a little owl, finds its counterpart in the ivory seal (Fig. 410 *bis, a-d*), probably from a similar primitive vault of Mesarà.⁴

When compared with hieratic hawks and lions that already make their appearance in Egypt by the Age of Menes these Cretan animal sculptures are of more animated conception. The dove is sheltering its young. The lion guards the prone body of a man. The hound stretches himself as 'dozens of crop-eared dogs of the same peculiar long-legged and emaciated type'⁵ have stretched themselves in the Cretan village streets for the last 4,000 years.

The great multiplicity of form that characterizes the earlier Minoan seals⁶ was considerably restricted when, about the beginning of M. M. II, their engravers began to attack hard stones such as cornelian, agate, chalcedony, and rock-crystal, some of which materials were already not unknown for beads. The three- and four-sided seals—their originally thick-set form being modified to that of an elongated prism—became a well adapted vehicle for hieroglyphic figures at the beginning of the Middle Minoan Age and survived to the close of M. M. II. In M. M. III this was succeeded by a shorter form with bossed sides, generally presenting 'talismanic' motives.

E. M. sculptural style common to stone vases and bead-seals.

Little owl type.

M. M. seal types on hard stones: hieroglyphic prisms.

¹ From Hierakonpolis: in the Ashmolean Museum (specially drawn). The sockets for insertion of legs and tail anticipate the technique of the Minoan ivory figurines.

² See below, p. 523, Fig. 469, and cf. *P. of M.*, ii, Pt. I, p. 48 seqq. and Fig. 23 above ('The bow of Neith').

³ Seager, *Mochlos*, pp. 20, 21, and Fig. 5; cf. *P. of M.*, i, p. 94, Fig. 62.

⁴ This seal, obtained by me from Southern Crete, may well have been one of the scattered

relics from the destroyed Tholos tomb of Hagios Onuphrios. Dr. Marinatos informs me that the owl vase was in the Mitsotakis Collection at Candia, but its find-spot is not recorded. To my own knowledge specimens from Hagios Onuphrios—the sole source of such relics at that time—had passed into Mitsotakis' possession shortly before 1894.

⁵ R. B. Seager, *Mochlos*, p. 21.

⁶ See especially *P. of M.*, i, p. 117 seqq., Figs. 86, 87.

'Signet Type of Seal, due to Hittite Influences.

'Signet' seals and those with fore-parts of Lions.

A new type of 'signet-seal' also used for hieroglyphs seems at this time to have owed its temporary vogue to Hittite influences. This, indeed, is confirmed by the discovery of a specimen in silver from East Crete,¹ a metal common on the Anatolian class of seals, but otherwise unexampled in the Minoan series.

Some variety of form was also maintained by the occurrence of seals with their upper surface imitating the whorls of shells or elegantly convoluted, and one example at least exists of a XIIth Dynasty Egyptian scarab of amethyst engraved with Minoan signs.

Disuse of hieroglyphic types in M. M. III.

About the close of the M. M. II *b* phase a fundamental change takes place in sphragistic usage. The fields of the seals are now no longer filled with hieroglyphic signs, and at the same time the current form of prism seal, with its flat elongated facets, so appropriate for such inscriptions, is itself given up. On the later specimens of these prisms themselves we begin to see animal designs, for which their narrow fields were not well adapted. The 'signet' type, though small for such pictorial subjects, seems on the other hand to have supplied the remarkable head of a Minoan prince, with a

Appearance of portraiture, naturalistic animals, and rock scenery.

strong Armenoid profile²: the first attempt at anything like realistic portraiture preserved to us. So, too, a cornelian 'signet' found in East Crete depicts a pair of wild goats on a rocky peak (Fig. 417).³ Among the seal impressions from the 'Hieroglyphic Deposit' at Knossos, however, there now occur, beside late examples of the 'signet' class, singularly naturalistic representations of rocky landscapes in a round slightly bossed field of large compass, indicating the advent of the new, lentoid type.



a



b

FIG. 417 a, b.
WHITE CORNELIAN
'SIGNET'; NEAR
KRITSA.

Flat-sided Disks—transitional links with Lentoid Type.

Flat-sided disks, precursors of lentoid type.

It is, indeed, difficult from impressions alone to distinguish such lentoid beads from a parallel class with broad flat edges that now comes into vogue. An intaglio of this kind, showing a very natural figure of a horned sheep, standing on a stepped base, is here reproduced (Fig. 418 a).⁴ The upper

¹ Obtained by me by exchange from the late R. B. Seager.

² See above, p. 474, Fig. 399, and cf. *P. of M.*, i, p. 272, Fig. 201, a.

³ We see on the handle an elongated version of the rope pattern of Hittite and Syrian association.

⁴ Cf. *P. of M.*, i, p. 684, Fig. 503, b.

part of the field, with its filling of upright bars joined together by

diagonal lines, links this to a common class of bead-seals of the same flat-sided shape, elsewhere explained as a conventional attempt to represent a façade of a building (Fig. 418 *b*).¹



FIG. 418 *a*. 'HORNED SHEEP'. LATTICE-WORK ABOVE: 'FLAT-SIDED' DISK; CENTRAL CRETE.

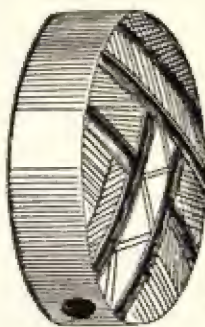


FIG. 418 *b*. 'FLAT-SIDED' DISK WITH FAÇADE OF BUILDING SHOWING LATTICE-WORK.

These flat-sided disks are the successors of a similar type in ivory and soft stone, of M. M. I *a* association, with engraved designs both on the upper and the lower surface. They

are finally assimilated to the true lentoid form by transitional stages.

The Lentoid Type.

Of the true lentoid type a quite recent find in the Gortyna district has

produced an example of great chronological import (see Fig. 419). It is of yellow steatite and presents a foliate pattern closely akin to the central device on

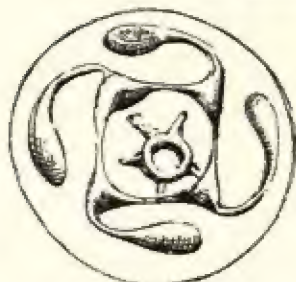


FIG. 419. LENTOID BEAD OF YELLOW STEATITE FROM NEAR GORTYNA, WITH TRACES OF RED INLAYING MATERIAL. (THE PATTERN RESEMBLES THAT OF A L. M. II *a* POLYCHROME VASE (c. 1700 B.C.).)



a highly decorative polychrome pot from the North West Treasure House at Knossos² of mature M. M. II *a* date (inset). It is further remarkable in another way, a part of the incised design

showing remains of a bright red filling material. This, then, was not a seal but an ornamental



FIG. 419 *bis*. HEAD OF DERVISH PRIEST FROM LITTLE PALACE.

¹ *Ib.*, pp. 564, 565, Fig. 411, *a-d* (*c 2* is reproduced in Fig. 418 *b*).

² See *P. of M.*, i, p. 246, Fig. 186, *a*, and cf. Coloured Plate III.

bead. The steatite bead-seal found in the Little Palace, presenting the head of a chaunting priest, here reproduced in Fig. 419 *bis*¹ is placed by its find circumstances well within the borders of M. M. III. Like the flat-edged class, it has a device on both faces. At the same time the strongly characterized portraiture maintains the tradition of the M. M. II clay-sealing of the 'Priest King' from the Hieroglyphic Deposit, though the facial type is very different.²



FIG. 420. SPHINX
(FROM ZAKRO).



FIG. 421. EYED BUTTERFLIES
(FROM KNOSSOS).

Lentoid type in vogue by M. M. III.

The Zakro seal impressions.

It is fairly clear that the bulk of the fantastic types on clay sealings from Zakro and elsewhere,³ the earlier examples of which may be safely attributed to the M. M. III Period, belonged to lentoid types.



FIG. 422. SEALING OF LENTOID
TYPE HIEROGLYPHIC DE-
POSIT: KNOSSOS. (M. M. II.)

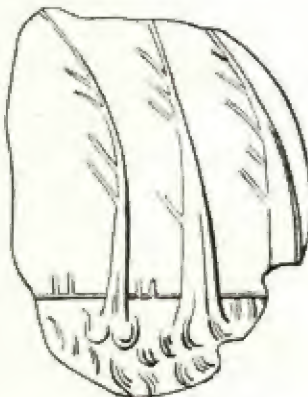


FIG. 423. SEALING FROM
TEMPLE REPOSITORY.



FIG. 424. FLYING BIRD SEAL-
ING: H. TRIADA.

These are more fancy free than any other class of intaglio designs to be found either in the Ancient or the Modern World. An airy touch is supplied by the fondness of the artists for wings of all kinds—of birds, butterflies, and bats. What could be a more graceful composition than the facing Sphinx, here reproduced (Fig. 420)?⁴ Its eyed wings are suggestive of a peacock butterfly, such as we see in a triple coil on a seal impression from the Palace site at Knossos (Fig. 421), itself of this fantastic class.⁵

¹ See above, p. 218, Fig. 167 *b*.

² See above, p. 474, Fig. 399.

³ See *P. of M.*, i, p. 701 seqq.

⁴ *P. of M.*, i, p. 705, Fig. 529, *c*.

⁵ *Ib.*, Fig. 529, *d*.

The eyes on this themselves approach the symbol of the all-seeing divinity, such as appears in the field of more than one signet-ring.

Fantasy apart, designs of this class often reveal the truest sympathy with natural forms and surroundings, as is seen in the design of a fish and squid stranded in a rocky pool, on a Knossos sealing already referred to (Fig. 422). In Fig. 423, on a sealing of M. M. III date,¹ we actually seem to have an instantaneous glimpse of what might be willows bending to the breeze, which stirs flood water round. Fig. 424 showing a flying bird, on a seal impression from Hagia Triada,² supplies another good example of this free spirit.

Lentoid types:
Flying
bird.

Lentoid showing Calf's Head.

Unfortunately, owing largely to the rarity of contemporary tombs, we have largely to rely on clay seal impressions for our knowledge of this early lentoid class. It is possible, however, to illustrate for the first time here a remarkable specimen, exceptionally executed in dark steatite, from Mirabello, East of Candia³ (Fig. 425 and Suppl. Pl. LIV, *a*). Clearly it is a calf's head, dressed, without the eyes, for culinary purposes. The long lachrymatory gland is well indicated, and the features of our old friend, the 'Mock Turtle', are clearly recognizable. The head is here accompanied by three globules or dots, which in the numeral system of the contemporary Linear Script A, as in the preceding Hieroglyphic series, would signify 30. We may perhaps conjecture that it was a seal for warrants for a share of sacrificial offerings such as is usually allotted to votaries. The modelling of the intaglio itself is extremely fine, and it must, with great probability, be regarded as an early work of the Third Middle Period. Fine illustrations of lentoid types belonging to the succeeding Late Minoan style are supplied by Figs. 579, 580 and Suppl. Pl. LV, *d, h* below, showing a stag seized by two lions and a mortal combat of two lions for their quarry.

Calf's
head pre-
pared for
cooking.



FIG. 425. DARK STEATITE LENTOID (M.M. III) FROM MIRABELLO.

Contrasted Group of Three Water-fowl on Lentoid Bead-seal.

A beautiful and in many ways remarkable piece, from its naturalistic style, belonging to the great transitional epoch M. M. III-L. M. I *a*, is an

Group of
three
water-
fowl.

¹ *Ib.*, p. 697, Fig. 519.

² Acquired by me, through exchange, from

³ Doro Levi, *Le Cretule di Hagia Triada e di Zakro*, p. 27, Fig. 52 and Pl. IX, 28. Mr. R. B. Seager. The surface is slightly worn.

intaglio in an opaque green stone found near Mirabello East of Candia. It is an instantaneous sketch, presenting a group of three water-fowl, displayed in such a way that each illustrates a different phase of bird life (Fig. 426).



FIG. 426. GROUP OF WATER-FOWL: M. M. III-L. M. Ia: MIRABELLO, CRETE ($\frac{2}{3}$).

One is asleep, with his head and long neck resting on his back; another, below this, plunges his head into a stream—indicated by undulated lines—in search of food. A third, behind, with outspread wing and head gracefully thrown back and extended neck, prepares for flight. No one will question the selective felicity and power of artistic grouping displayed in this design. It is executed with a firm hand and with great sureness of touch, which, though singularly free of details, brings the essential features into strong relief. The background is clear. Not a single papyrus spray, so characteristic of other versions of this subject, is here introduced to break



FIG. 427. DUCKS AND PAPYRUS SPRAYS: L. M. II-III: KNOSSOS ($\frac{1}{2}$).



FIG. 428 *a, b, c*. BANDED AGATE LENTOID: MIRABELLO ($\frac{2}{3}$).

the simplicity of the composition. The wing feathers are not defined, but the rendering of the outlines of wings themselves and the general contour is so skilful and true that the absence of such details hardly strikes the eye.

As a foil to the varied scene presented by the little masterpiece here reproduced, the design, on a green jasper intaglio found on the site of Knossos itself,¹ is here repeated.

In this case, Fig. 427, we see a group of three wild ducks on the same level, two swimming one way and one another, while, above and in front, rise three papyrus sprays—one weighed down by two of the birds—in a manner often seen in the wall-paintings of the Egyptian Thebes. The

¹ Given me by Dr. Joseph Hatzidakis in 1899. Cf. *P. of M.*, iii, p. 116, Fig. 66 *a*.

conventional style of these sprays is suggestive of L. M. II-III vase decoration and is well dated by examples from the last palatial deposits of clay seal impressions at Knossos.¹

Later History of the Lentoid Class.

A good example of the fully developed lentoid type with a section and side view is given in Fig. 428. This gem, a banded agate, was found in the Mirabello district East of Candia, and the subject² may be compared with that of the elongated bead-seal, Fig. 559 below, a more or less contemporary work. Here a huntsman, rushing forward at a gigantic and truculent-looking *agrimi*, stabs it to the heart while warding off the horns with his other arm. In the field between his legs is a bull's head, often used as a fill-up object in Minoan intaglio designs.

Typical
lentoid
bead-seal.

So far as the existing evidence goes it would appear that the use of the lentoid form of bead-seal was by no means general before the mature L. M. Ia stage. By the close of L. M. Ib, however, it was already becoming predominant, as is well shown by the Vapheio deposit.³ As noted below,⁴ it now engenders a special lentoid type of design. In the days of the latest degeneration of Minoan Art, when the lapidaries had ceased to attack any materials but the soft steatite, the lentoid form became practically the only type. It was revived some five centuries later, together with the 'almond-shaped' form, in a choicer translucent green variety of the same material, by the gem-engravers of the 'Melian' School, of which contemporary Crete formed a somewhat subsidiary branch.

Predomi-
nance of
lentoid
type from
close of
L. M. Ib.

The Almond-shaped or Amygdaloid Type.

Another class of bead-seal makes its appearance about the same time as the fine lentoid gems, which for some time runs parallel with them. These almond-shaped or 'amygdaloid' type—otherwise known as 'glandular'—cannot be traced to any Minoan origin. As applied to beads, however, the form occurs on a larger scale among Sumerian relics of a date approaching 3,000 B.C., and is also known in Egypt from late Prehistoric times to the XIIth Dynasty, though there the outline was less elongated.

Almond-
shaped or
'amygda-
loid'
bead-
seals.

¹ See below, pp. 608, 609 (Fig. 597 A, v).

² See, too, Fig. 558, p. 577.

³ Out of 37 seal-stones from the Vapheio Tomb illustrated by Tsountas, *Εφ. Ἀρχ.*, 1889, Pl. X, 24 are of the lentoid type. Of the remainder, one (Figs. 5, 6) represents a survival of a M. M. III three-sided form, another is

a traditional M. M. III *b*-L. M. I *a* amygdaloid of the 'talismanic class', and the others represent either the 'elongated' bead-shaped type that now comes into vogue or the amygdaloids with rather narrow field.

⁴ P. 615 seqq.

Transitional
M.M. III-L.
M. I a
examples.
Fish in
perspective.

Its field was particularly adapted for scenes in which animals are depicted at full gallop, as on some fine seal impressions, probably from stones of this class already discussed,¹ belonging to the M.M. III-L. M. I a phase. To the same great Transitional Age must be ascribed an instantaneous sketch of a flying-fish, compared above with those of the fresco (Fig. 429),² and the perspective rendering of the *skaros*—a kind of parrot wrasse—with its sea pasture here reproduced in Fig. 430.³ To it, too, we must set down the hunting scene depicting the lassoing of large horned sheep, and the herd of Cretan goats on another Cornelian gem from Crete (Fig. 431).⁴

'Talismanic'
designs.

As has been shown above, it is this class of stone that was the special vehicle of the talismanic types, belonging in an overwhelming degree to L. M. I a and the latest M.M. III phase. By the beginning of the L. M. I b period, and a date round about 1500 B.C., this form of bead-seal seems to have practically gone out of use, and, among thirty-eight intaglios of the Vapheio deposit, only one, presenting the 'covered chalice'⁵ of the talismanic series—obviously to be

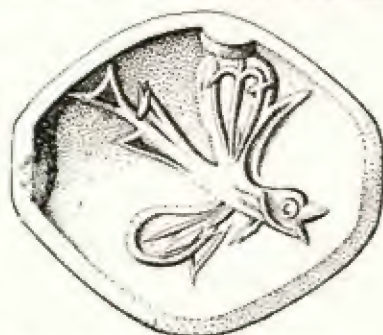


FIG. 429. CORNELIAN AMYGDALOID: FLYING-FISH.



FIG. 430. CORNELIAN AMYGDALOID: SKAROS FISH.



FIG. 431. CORNELIAN AMYGDALOID: HERD OF CRETAN GOATS.

¹ As, for instance, the racing lions, *P. of M.*, i, p. 716, Fig. 539, *a*, and the flying leap of wild goats (*ib.*, Fig. 539, *c*). It is often difficult in the case of clay sealings to distinguish the impressions of bead-seals of this class from those of signet-rings. The amygdaloid gems as a rule are somewhat more bossed.

² *P. of M.*, iii, pp. 128, 129, and Fig. 84.

³ On a cornelian bead-seal from Lappa, in West Central Crete, obtained by me in 1895 (see *op. cit.*, p. 677, Fig. 498).

⁴ B.M. Cat. No. 34: presented by Mr. W. R. Paton in 1884.

⁵ *Ἐφ. Ἀρχ.* 1889, Pl. X, 17.

regarded as a specimen that had survived in use—is of the true almond-shaped form.

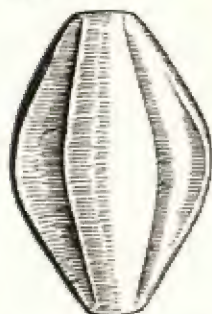


FIG. 432. AMYGDALOID (HAEMATITE) WITH GROOVED BACK. ($1\frac{1}{2}$)



FIG. 433. 'ELONGATED' AMYGDALOID TYPE WITH GROOVED BACK. ($1\frac{1}{2}$)

This amygdaloid class affords a few isolated instances of a peculiar cutting of the back of the stone which, in the succeeding Period, becomes general in the case of the closely allied family of 'elongated beads'. In conformity with this lapidary fashion, the origin of which is not clear, the bossed centre of the field is framed, as it were, by a slight groove (Fig. 432).¹ This dorsal contour, though as yet of very rare occurrence, is already seen in the case of a gem with a lassoing scene, Fig. 543,² which can hardly be later than the early part of L. M. Ia. On the earliest specimens of this class, it does not appear.³ It is rare on the considerable series of beads presenting talismanic motives.⁴

'Elongated' Amygdaloid Type of Bead-seal.

The earlier amygdaloid type practically dies out about the beginning of L. M. Ib. A more elongated type, however, answering to a bead form, that came into vogue in the mature L. M. I epoch, survives into the two succeeding Periods. This form, indeed, is very characteristic of the last Palatial Age at Knossos,⁵ and is also well represented in the Vapheio group.⁶ The outline was specially well adapted for seals presenting single figures like the long-robed priestly personages, one of which that shows a dove-holding figure⁷—its back view appears in Fig. 433. The delicate incision of its moulding carries to still greater elaboration that so frequent in the ordinary amygdaloid type. A specimen illustrated below (Fig. 559), which depicts a hunter in the act of dispatching an overthrown

'Elongated' type of bead-seal.

Survives to L. M. Ib and L. M. II.

¹ The characteristic form with the grooves was already illustrated by Furtwängler, *Beschreibung der geschnittenen Steine im Antiquarium*, p. 5 (no. 42).

² P. 569 below.

³ As, for instance, on those showing the *Skaros* and flying-fish (Figs. 429, 430).

⁴ It appears on two specimens of these pre-

sents a very degraded version of the lion's mask.

⁵ See *P. of M.* ii, Pt. I, p. 75, Fig. 34 E.

⁶ *Εφ. Αρχ.* 1887, Figs. 12, 19, 22-4, 26-30, 36. Nos. 30 and 36 might be described as transitional amygdaloids. For gold examples see below, pp. 511, 512.

⁷ See above, p. 405, Fig. 336.

agrimì, still reflects the bold execution of the best period of the Minoan gem-engraver's Art. 'Elongated' bead-seals of gold and of superior size form an important group of the Thissê series; their backs, however, are plain.



FIG. 434. CORNELIAN CYLINDER OF 'TALISMANIC' TYPE: E. CRETE.



FIG. 435. CORNELIAN CYLINDER WITH DOLPHINS REPEATED: E. CRETE.

The Cylinder Type: Early Reflection and Later Imitation in Minoan Crete.

Cylinder type.

Early Aegean adaptations of Oriental prototype: its distant character.

The widespread family of early Oriental cylinders—extending to the Nile Valley—could not be without its effect on primitive usage throughout the East Mediterranean basin. In Cyprus of the Copper Age we already see, so far as the tubular form was concerned, more or less exact reproductions, coupled with barbaric copies of the figured representations. A similar phenomenon occurs at Hissarlik, where, however, the rude floral and branch-like designs¹ indicate derivation from types very characteristic of the Anatolian midlands. In the Cyclades, more remotely situated, we see solid cylinders, with rude geometrical decoration, attached by means of a holed projection at top. So, too, in Early Minoan Crete, seals appear of soft stone, ivory, and terra-cotta with side perforations. In that case the engraved figures are on the upper and lower faces instead of being round the circumference, and the considerable repertory of designs is quite independent of the Oriental cylinder class.²

At most we have a suggestion due to indirect acquaintance. At the

¹ *Ilion* (A. Gotze), p. 447, and cf. Schliemann, p. 416, Figs. 502, 503 (and cf. p. 415, Fig. 500). The floral design recalls D. G. Hogarth, *Hittite Seals*, &c., no. 32 (Pl. II).

² Cf. especially Xanthoudides, *Vaulted Tombs of Mesara* (Transl. Droop), Pls. VIII, XIII, XIV; Seager, *Mochlos*, p. 70, Tomb XVIII;

translucent steatite. A specimen of terra-cotta, with primitive engravings above and below from the Hagios Onuphrios Deposit, was described by me in *Cretan Pictographs* (Quaritch, 1895), pp. 103 and 107, Fig. 81, where its dissimilarity from the Oriental class was pointed out.

beginning of the Age of Palaces, however (M. M. I *a*)—as part of a new stream of influence from Eastern quarters in the time of the First Babylonian Empire, or even earlier ¹—there is evidence of the actual importation into Crete of cylinders of the Oriental type.

Actual import of Babylonian cylinders in M. M. I *a*.



FIG. 436. HAEMATITE CYLINDER (L.M. III *a*).
HAGIA PELAGIA, W. OF CANDIA.

Somewhat later, a more direct acquaintanceship with this form of seal leads to its literal adoption as a Minoan type, though without any attempt to take over the Oriental subjects. Two specimens in red cornelian are here reproduced, both of them from Eastern Crete (Figs. 434, 435), bearing traces of the rapid use of a hollow drill. Fig. 434 fits on to the 'talismatic' class

Cylinder form first copied in L. M. I *a*.

above described,² and shows a kind of base with vegetable shoots coupled with heads of a bull and two-horned sheep. The other, presenting a series of repeated dolphins and zigzags, betrays the same rapidity of execution.

The agate specimen, Fig. 387 above,³ depicting a hero, protected by a Minoan Genius, attacking a lion, belongs to a good L. M. I *b* style.

A cylinder—cut out of haematite, like the Oriental prototypes—was found in a tomb of the Minoan cemetery of Hagia Pelagia, a small haven West of Candia. It was dated by the associated pottery to the early part of L. M. III, and displays a fantastic hunting scene, clearly executed by a native artist (Fig. 436). A female figure is seated on a cantering animal, which, from its bushy tail—that rather resembles a wing—might be taken for a fox. Behind her walks a male attendant, carrying a Griffin on his shoulders as a trophy of the chase. The whole is set in a field of conventional papyrus, but with a rocky ground. This cylinder must be regarded as presenting an original Minoan composition, though the papyrus is Nilotic.

Haematite example from H. Pelagia.

The progress of colonization in the North-East Mediterranean angle—in Cyprus, and it may now be added, on the Syrian and Cilician coasts—led

¹ In the case of the gold-mounted lapis-lazuli cylinder from the Palace there is a strong reflection of a still earlier Sumerian style (see above, p. 424, and Fig. 350).

² See p. 446 seqq. The style of the bull's

head with sprays on either side recalls a three-sided cornelian bead-seal of the 'talismatic' class, of M. M. III fabric, seen by me at Elunda (Olous).

³ See p. 463. Found at Kakovatos.

Late re-
action of
Syro-
Hittite
cylinder
motives
on
Minoan.

to the manufacture, by the Minoan settlers themselves, of local classes of cylinders, not only of the same Oriental form, and, like Fig. 436, of the same haematite material, but with kindred religious representations. A group displaying versions of the Egyptian palmette pillar seems to belong to this class.¹ In other cases, as on cylinders referring to the cult of the Dove Goddess, Cypriote and Hittite Art traditions show such a close parallelism with that of Minoan Crete that the respective contributions cannot always be easily distinguished.



FIG. 437. HAEMATITE CYLINDER: HARBOUR TOWN OF KNOSSOS.

* Cypro-
Minoan¹
class.

Examples of such have been given in Section 102 above, including a faience cylinder of Syro-Hittite character, found at Vari,² in Attica, and illustrating the wide Aegean diffusion of such models. The question indeed suggests itself whether they may not have been imitated in Crete by Minoan engravers. The haematite cylinder of Cretan provenance described above in connexion with the Minoan Genii³—though the daemon is there coupled with a Minotaur—may still be assigned to the Cypro-Minoan class. But another specimen, Fig. 437, found some years back on the site of the harbour town of Knossos, near the river-mouth,⁴ bears internal evidence, not only of deviation from the normal cylinder style, but of details traditional with the Cretan seal-engravers.

Haema-
tite cylin-
der with
Minotaur
from
Harbour
Town,
Knossos.

The first episode, of a horned animal—in this case a stag—pounced upon by a hound while suckling its young, is a known Minoan motive.⁵ There follows a man-stag, with the head and upper part of his body bent down in a manner characteristic of designs of single- and double-bodied Minotaurs, and similar fantastic creations on Cretan lentoids.⁶ There is

¹ See A. E., *Myc. Tree and Pillar Worship*, p. 48 seqq.

² See p. 409 above, Fig. 339.

³ See p. 459 above, and Fig. 383.

⁴ Fig. 437 was drawn by M. E. Gilliéron, fils, from an impression obtained by me at the time. I am ignorant as to the present ownership of the cylinder.

⁵ E.g. *B.M. Cat. Gems*, Pl. II, 55 and p. 7 (cf. *J.H.S.*, xvii, 1897, Pl. III, 9 and p. 69) where

in both works the group is wrongly described as a deer and fawn.

⁶ A similar figure of a 'man-stag' occurred on a Late Minoan Cornelian lentoid found by the West Porch at Knossos (*Knossos, Report*, 1905, p. 18, Fig. 10). A parallel design of a 'man-bull' or Minotaur is seen on a haematite lentoid obtained by me from Milatos, Crete. Another Cretan specimen presenting a conjoined man-bull and man-goat is no. 85

nothing in the two remaining figures—a running animal and a seated Sphinx—to detract from the Cretan character of this cylinder.¹

The 'Flattened Cylinder' Type.

Amongst early forms of Minoan bead-seals, that described in this Work as the 'flattened cylinder' plays a special part. It is, indeed, the vehicle for a series of the finest achievements of the Cretan gem-engraver's Art.

'Flattened
Cylinder'
type.



FIG. 438. IVORY BEAD-SEAL:
M.M. Ia THOLOS B, PLATANOS
(?).

It seems impossible to point to a prototype of this form outside the Island, either on the Chaldaean or the Egyptian side. In Crete itself an ivory bead-seal from Knossos² with details recalling one from *Tholos A* at Platanos (E. M. III-M. M. Ia), and another from *Tholos B* there (M. M. Ia), Fig. 438,³ seem to be the only near parallels to be found among the seal-types of the primitive class, though the faces are flatter, and of squarer outline. The intaglio design on this is much worn, but shows a rude animal, and traces, apparently, of linear signs.

M. M. Ia
prototype
from
Platanos.

By M. M. II, however, the existence of the type in its characteristic aspect, with somewhat rounded faces, is attested by a clay seal-impression from Zakro, presenting hieroglyphic signs of Class B,⁴ and by an actual example in banded agate,⁵ with hieroglyphs of the same class on one side, and on the other a sketchy design of a wild goat with abnormally long

M. M. II
examples.

in the British Museum Collection, which has been often described since Milchhöfer's publication (*Anfänge, &c.*, p. 78, Fig. 50). As already shown (*P. of M.*, iii, p. 268 seqq.) the Spartan basalt (*lapis Laedaemonius*) out of which it is cut was stored in the Palace Magazines and freely used by its lapidaries.

¹ A cylinder from Mycenae, perhaps of local fabric, shows a male adorant before a group of five columns (*A. E., Myc. Tree and Pillar Cult*, p. 43, Fig. 24). By a clerical error there described as a 'lentoid'.

² Knossos, *P. of M.*, iii, p. 21, Fig. 11, there described as M. M. Ia, but cf. *P. of M.*, i, p. 118, Fig. 87, 9 from *Tholos A*, Platanos,

IV**

preponderantly E. M. III.

³ Xanthudides, *Vaulted Tombs of Mesara* (transl. Droop), Pl. XIV, no. 1070, and p. 116.

⁴ *Scripta Minoa*, i, p. 153, P. 145. Found in House A at Kato Zakro.

⁵ The face of this with the hieroglyphs was published by me in *Cretan Pictographs*, 1895, p. 30, Fig. 39 (*J.H.S.*, xiv, p. 299) from an impression of the stone which was then in Athens. Both faces are given by Furtwängler, *A. G.*, Pl. VI, 13, 14 and in Walters, *B. M. Cat. Gems*, Pl. I, 3 a, b. It was purchased by the B. M. at the Story-Maskelyne Sale, in 1921. The edges of this gem are exceptionally rounded.

L 1

horns, pursued by a dog over scale-like rocks.¹ Of finer style, though of contemporary execution, with similar long horns, is the *agrimè* leaping over rocky ground, with a tree behind, obtained by me from Rethymnos, and here reproduced (Fig. 439). The stone,



FIG. 439. 'FLAT CYLINDER' CORNELIAN:
RETHYMNOS, M. M. II (2).

a very beautiful banded agate, presents the peculiarity of having two perforations, and on grounds of style the intaglio may be placed within the borders of M. M. II *δ*. A chalcedony example from Knossos (Fig. 440, and Suppl. Pl. LIV, *c*),

of more or less contemporary date, shows a fisherman in exceptional loin clothing holding a *skaros* fish and an octopus on a string. This may date from early M. M. III.

Of special interest among early examples of the 'flat cylinder' class is that reproduced in Fig. 441,² obtained by me from a peasant on the site of Palaikastro, in 1894, where the stone, consisting of black steatite, is

Gold-plated specimen from Palaikastro.



FIG. 440. CHALCEDONY:
KNOSSOS (NW. OF SITE),
M. M. III (2).



FIG. 441. GOLD-PLATED
STEATITE 'FLAT CYLINDER':
PALAIKASTRO, M. M. III (2).



FIG. 442. I. M. II EXAMPLE,
ROYAL TOMB, ISOPATA, CHALCEDONY, GOLD-MOUNTED (2).

covered—as were small reliefs on vases in the same material—with thin gold plate (cf. Suppl. Pl. LIV, *δ*). This is impressed into a design of dolphins swimming, with rock-work in front, of the naturalistic style common to M. M. II *δ* and M. M. III. The object here was to imitate an engraved gold bead of this form, and it will be seen that 'flat cylinders' of gold were associated with some of the finest intaglio designs of Mycenae and Thisbê,

Gold beads of this class with fine intaglios.

¹ A flat cylinder of banded agate in a somewhat similar style, showing a Griffin seizing a deer (Berl. Cat., No. 51) came from the

Carian island of Symê.

² Cf. *P. of M.*, i, p. 675, Fig. 495, *a*, *b*.



a



b 1



b 2



c



d



e



f



g



h



i



j



k



l



m

SELECT INTAGLIOS OF EARLY FINE STYLE: *a*, M. M. II; *b-m*, M. M. III AND TRANSITIONAL.

belonging to the early phase of L. M. I.¹ From this time onwards, except occasionally for simple beads without engraved designs, the 'flattened cylinder' tends to go out of use. In Tomb I at Isopata, indeed, the structure and L. M. II sherds of which show that it was contemporary with the neighbouring Royal Tomb, a flat cylinder of chalcedony was found,² which may be taken as evidence that the type remained still in occasional use to the close of the Palace period. It is mounted with plain gold bands at the two ends—slightly overlapping the figures, and displays, in inferior style, a collared dog, with lion-like head, of a size quite disproportionate to that of the two men who accompany it (Fig. 442). It is a significant fact, however, that no seal types of this kind occurred in the Vapheio deposit. They seem to be equally to seek in the later tombs of Mycenae.³ Only a single impression of this class was found, to my knowledge, among the hoards of sealings belonging to the time of the destruction of the Palace at Knossos. (See Figs. 597 A, B, pp. 608, 609 below.)

Masterpieces on Flat Cylinders: the Bull caught at Cistern.

The oblong field of this form of bead-seal was better fitted than any other—subject to the restrictive limits of the engraver's Art—for the reproduction of panel designs of the same shape, painted, in the flat or in stucco relief, on the Palace walls. It is, perhaps, for that reason that several of the chief masterpieces of this Art have come to light on flat cylinder seals. Among these it is hardly necessary to mention the gold bead-seal from the Mycenae Shaft Grave, depicting the wounded lion on the rocky steep (see below, Fig. 507),⁴ and the grand figure of the bull, surprised and grappled while drinking at a cistern (Suppl. Pl. LIV, *c*),⁵ the front of which in fact repeats the details of a decorative wall-painting at Phaestos.

Agate
bead
showing
the bull
caught at
cistern.

Gem of 'Flattened Cylinder' Class depicting Tumblers, and Derivative Types: Minoan Comparisons with Indigenous Nilotic Group.

Recent discoveries have produced two fresh examples of this class of bead-seal of first-rate interest. The first of these was found by a native proprietor on a knoll of natural formation about half a mile North of the Palace site at Knossos.

Chalcedony from
Knossos
showing
tumblers.

The stone is a bluish chalcedony, and its subject is two tumblers

¹ See above, *P. of M.*, iii, p. 124, Fig. 75. A bronze specimen of this class, *P. of M.*, ii, p. 243, Fig. 140, shows a ship at full sail.

² A. E., *Preh. Tombs*, *etc.*, p. 9, Fig. 14 (L. M. II).

³ The fractured specimen showing a Genius

holding up a kid found in a tomb of the Phaestos Cemetery (see above, pp. 434, 435, Fig. 358, *a*) may best be regarded as a survival from the preceding epoch.

⁴ See below, p. 546.

⁵ See *P. of M.*, iii, p. 186, Fig. 129.

in a flowery field (Fig. 443 and Suppl. Pl. LIV, *j*). The figures, as will be seen, exactly balance each other, and the whole scene is symmetrically designed. At the same time the style of engraving is of the finest kind, while the sinewy human forms are well proportioned and elegantly disposed. The plants—



FIG. 443. 'FLAT CYLINDER' OF BLUE CHALCEDONY; KNOSSOS (*j*).



FIG. 444. TUMBLERS ON LENTICULAR GEM.

one of which springs up between the acrobatic figures—are themselves conventionally rendered, and it is impossible to identify them with any certainty. The flowers, set on long stalks, rise on either side, and

a central one shoots up between the tumblers' heads.

This triplet of sprays is itself repeated in a degenerate shape on the lenticular intaglio, Fig. 444,¹ in which we must certainly recognize a derivative



FIG. 445. NILOTIC CYLINDER SHOWING TUMBLER ABOVE.

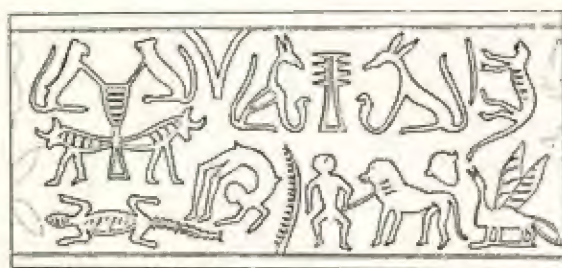


FIG. 446. EGYPTIANIZING CYLINDER SHOWING TUMBLER IN LOWER REGISTER.

of the acrobatic scene given in Fig. 443. The legs of the tumblers, in this case, however, do not cross one another, and the forearms are directed towards the stem of the central plant.

One important feature in the more perfect design, as seen in Fig. 443, is wanting in the derivative version. This is the double crest curving back from the top of the performers' heads. From the slight widening of these in their central part it is impossible to regard them as any kind of horns and the idea must be rejected of men in any respect travestied to look like animals—Cretan wild-goats, for instance. On the other hand, the slight

Their
'Libyan'
plumes.

¹ From a plaster cast obtained at Athens.

broadening observable in the upper part of the crests answers to a characteristic of the double plumes worn by the Libyan tribes, and very conspicuously in the case of some of their pre-dynastic representations.¹

This comparison, indeed, leads us a step further. The tumbling figure

Tumbling figures on early Nilotic cylinders.



FIG. 447. KARNAK PRISM: BLACK STEATITE.

is in fact associated with a special class of early cylinders in black steatite, presenting a medley of subjects that curiously combine Nilotic and Chaldaean features. Their style is often barbaric (see Fig. 445), but sometimes—as is illustrated by Fig. 446 here given—of better workmanship.² This class of cylinder is quite distinct from the well-known Egyptian series with hieroglyphic inscriptions, mainly executed in the same black steatite, that begin with the earliest Dynasty, and often presenting royal names from Narmer onwards.³ Certain common features in style and subject are, however, discernible.

In first calling attention to this primitive non-Egyptian class of cylinder seals thirty-five years since,⁴ it was already possible for me to cite evidences of striking conformity between figures there represented and those on early Cretan seal-stones. This was supplemented by the notice of a prism-seal acquired at Karnak,⁵ and reproduced here in Fig. 447, which—together with elements common to the cylinders, such as the crocodile-holding man, the hornets and scorpions, and conjoined fore-parts of an animal—presents the characteristic shape of a three-sided Minoan seal-stone. In its black steatite material and its wide perforation, this object resembles the cylinders of this

And on Karnak prism.

¹ E.g. that on a slate palette, *P. of M.*, ii, Pt. I, p. 51, Fig. 24, a. For the later type see Fig. 24, b.

² From Lajard, *Culte de Mithra*. See my *Further Discoveries of Cretan Script* (*J.H.S.* xvii), p. 364, Fig. 30.

³ See especially Newberry, *Scarabs, &c.*, (1906), p. 30 seqq., and for a full conspectus of the material Petrie, *Scarabs and Cylinders*

with Names (1917), Pls. I-VII, &c.

⁴ *Further Discoveries of Cretan and Aegean Script: with Libyan and Proto-Egyptian Comparisons*, *J.H.S.* (1897), p. 362 seqq., and Quaritch, 1898. Cf. 100 *Scripta Minoa*, i (1909), pp. 122, 123.

⁵ By Mr. Greville Chester; presented by him to the Ashmolean Museum (*op. cit.*, p. 362).

Cretan
reaction
in Karnak
prism.

group, otherwise the elongated three-sided form is unique amongst Nilotic objects of the kind, and corresponds with that of the later pictographic and the hieroglyphic seals of Crete. It surely indicates a reaction from that side. The double animal in fact resembles a Cretan wild-goat. (Cf. Fig. 448.)

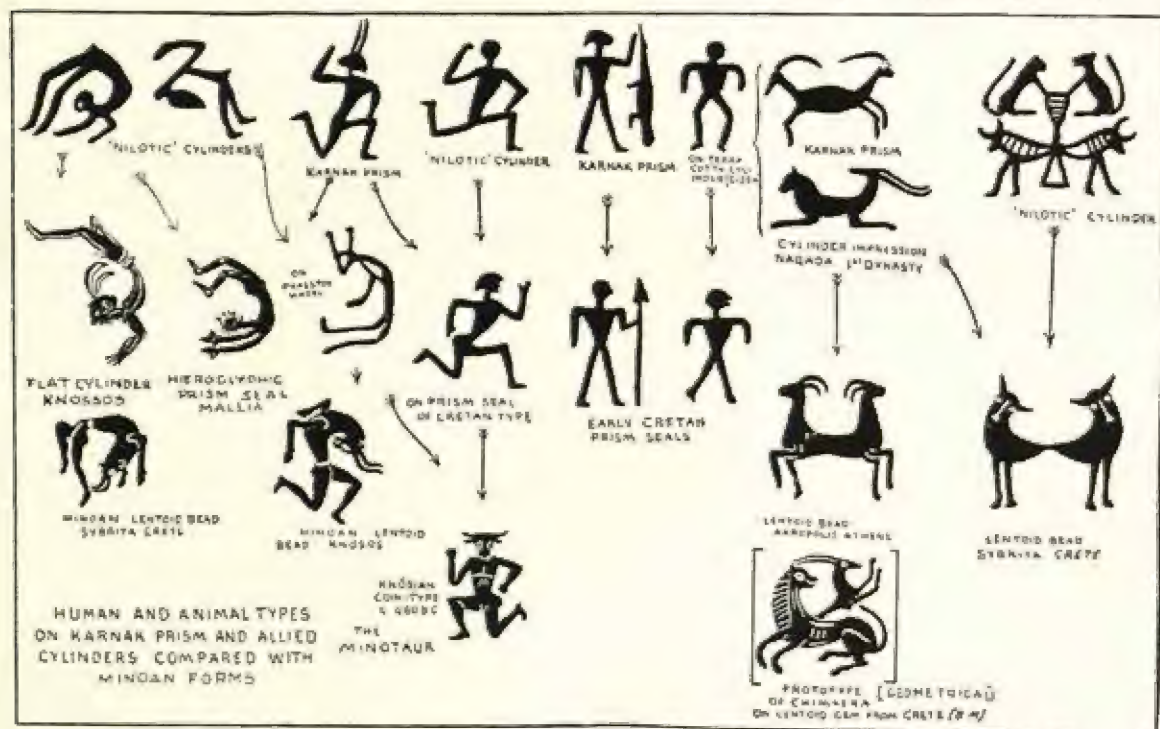


FIG. 448. COMPARATIVE TABLE OF EARLY NILOTIC AND MINOAN TYPES.

This prism seal, like the cylinders with similar figures, must in fact be grouped together with a whole family of 'button-seals', the reversed designs on which have been shown, in the first volume of *Scripta Minoa*,¹ to have had a marked influence on a series of Minoan seal-stones, mostly of the early, compact, three-sided class, but some of them also preserving the button shape. If to this be added the influence of certain 'tabloids' and oblong seals,² belonging to the same group,³ it will be seen how far-reaching were the effects of the later wave of old Nilotic elements on the glyptic Art of Crete from about the close of the Early Minoan Age onwards, and which, as shown by the Karnak prism, seem to have had a reaction on the Egyptian side.

It is possible, indeed, after the lapse of many years, to repeat here, in

¹ *Scripta Minera*, i, p. 125, Fig. 65; Table XX. Cf., too, *P. of M.*, i, p. 124, Fig. 92.

* See *Ib.*, i, p. 122, Fig. 91. There the materials are steatite and limestone.

² See *P. of M.*, i, Fig. 260, *b, c* (opp. p. 358).

Fig. 448, with a few supplementary touches, the Table prepared on the basis of my earlier researches. It will be seen that, amongst the running figures, the horned type from the Karnak prism (Fig. 447 above) may well supply the original suggestion of a version of the fully developed Minotaur, recurrent on Late Minoan lentoid seals, and which was itself revived with human arms in the Greek conception of the monster as seen on the coins of Knossos.¹

The acrobatic figure from the 'Nilotic' cylinder, Fig. 446, not only supplies the prototype of the 'tumblers' on our Knossian intaglio, but may also have influenced the parallel pose of the Minotaur, such as is seen on a black lentoid from Knossos,² above a star (Fig. 449), and on another from Sybrita on the Western side of Ida (see Comparative Table, Fig. 448). The context shows, indeed, that the rude horned personage on the 'Nilotic' cylinder connects up with much earlier man-bull types of Sumerian cylinders, which later took shape in the Babylonian Ea-bani.



FIG. 449. MINOTAUR AND STAR ON BLACK STEATITE LENTOID: KNOSSOS.

The cylinders with these primitive figures are themselves of the more elongated, old Chaldaean form, contrasting with the stumpy appearance of the usual early dynastic Egyptian types. The 'buttons', which fit on to the 'Nilotic' cylinder group, and form indeed its principal ingredient, recur at Bismiya,³ and elsewhere, in central Babylonia. Their first appearance in the Nile Valley dates from about the time of the Syro-Egyptian VIIth and VIIIth Dynasties.⁴ On the other hand, the two-headed animals, bulls or goats, that appear on this group, recall similar forms on the pre-dynastic slate palettes of the indigenous 'proto-Libyan' element,⁵ itself in turn already influenced by Sumerian Art. The winged monster of Fig. 446 is surely a version of the 'Old dragon', Tiamat.

It must at the same time be recognized that the cylinder type on which this monster occurs, and which further supplies the acrobatic figure, presents several dynastic Egyptian features, notably the *dad* sign between two beasts

¹ See, too, *P. of M.*, i, p. 359 and Fig. 260, *d, e, f*.

² See *P. of M.*, i, pp. 358, 359, and Fig. 260, *d* (facing p. 358). The derivation of Early Cretan 'maze' or 'labyrinth' pattern from a parallel Nilotic source is also there illustrated, but the 'maze' and 'Minotaur' types are not placed in connexion with one another in Minoan Art, as they are on the Fifth-Century

coins of Knossos. In its simplest shape the 'maze' connects itself with Egyptian 'house-plan' or 'Palace' sign.

³ Specimens in the University College Collection, London.

⁴ See Petrie, *Buttons and Design Scarabs*, p. 2 seqq., and cf. Plates.

⁵ See A. E., *Further Discoveries of Cretan, &c., Script*, p. 367.

Motives from early Nilotic cylinders and prism compared with Minoan.

of Set, the fore-legs of which terminate in *uraci*. Tumbling performances, as we shall see, were also well known in Egypt.

In every form of Nilotic culture there has been an intermixing of heterogeneous ingredients, but the group to which this Egyptianizing example itself belongs must, on the whole, be assigned to the older native



FIG. 450. TUMBLERS ON GREY MARBLE CYLINDER OF A NILOTIC CLASS.

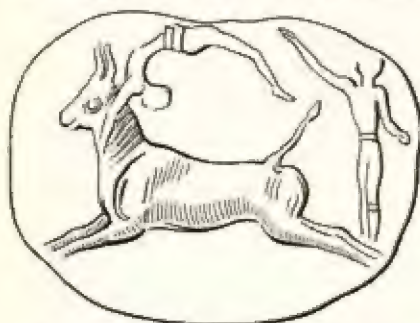


FIG. 451. FEMALE TAUREADOR TURNING SOMERSAULT; CLAY SEALING: TEMPLE REPOSITORIES, KNOSSOS.

element. The recurring lizard types suggest the Libyan Desert. On the banks of the Nile they are metamorphosed into crocodiles.

These, in turn, in reversed position—as seen on a clay cylinder impression of this class in the Cairo Museum¹—are adapted to the Oriental 'anti-thetic' scheme, such as we already find it in a 'proto-Libyan' medium on the ivory handle from Gebel-el-'Arak.²

The proto-Semitic features in the Libyan languages themselves bespeak a fundamental kinship of the older inhabitants of the Nile Valley with the lands to the East of them, and this was culturally reinforced by successive incursions of Semite tribes into Egypt.

The tumbler type is also found on another cylinder, of the shorter and more compact dynastic Egyptian form, but which, though acquired at Cairo, shows a style of engraving wholly different from the native Egyptian class (Fig. 450).³ It is deeply engraved in what seems to be a kind of grey marble, and presents two acrobatic figures, the attitude of which closely resembles that of our Cretan gem, Fig. 443.

This cylinder clearly fits on to the series above-mentioned, and must

¹ A.E., *op. cit.*, p. 364, Fig. 31; De Morgan, *Recherches sur les origines de l'Égypte*, ii, p. 257, Fig. 857.

² *P. of M.*, ii, Pt. I, p. 27, and Suppl. Pl. XII a. On the ivory knife handle the figure of Gilgames is seen in his Sumerian guise, seizing

two lions.

³ Ashmolean Museum. Bought at Cairo in 1921 by Mr. G. D. Hornblower. In the catalogue of acquisitions it is (very conjecturally) described by Hogarth as 'South Semitic'.

Proto-Semitic element in pre-dynastic Egypt.

Tumbler type on cylinder of 'compact' class.

be referred, like the others, to some surviving indigenous element in the Nile Valley. Its general shape seems to answer best to Cylinders of the Vth and VIth Dynasties.

In the case of the 'tumbler' type, as depicted on the Minoan intaglio, Fig. 443, the characteristic feather crests may be reasonably taken as a tribute to the excellence of Libyan performers, to which we may also see



FIG. 452. FEMALE EGYPTIAN TUMBLERS OF SOCIAL AND CEREMONIAL OCCASIONS.

a reference in the acrobatic figure on the 'Nilotic' cylinder (Fig. 446). On the other hand, among the Minoans themselves tumbling and other acrobatic feats were a traditional feature in the bull sports, and had already entered into the programme of these in their Anatolian home-land.¹ The 'Cowboy Fresco' is a later example of this, and its best sphragistic illustration, a clay seal impression from the Temple Repositories, Fig. 451,² supplies a record of it in Minoan glyptic Art by the close of M. M. III.

Minoan
tumbling
of Bull
Sports.

'Tumbling' still forms an essential part of the Cretan *πηδηκτὸς χορός*, where the leaders of the dance execute somersaults with surprising agility, and recall the *κυβιστητήρ* of the *Iliad*, who accompanied and led the ring-dance.

It was, as noted above, equally well known in historic Egypt, where a hieroglyph existed of a kilted male tumbler.³ Such already appear in the XIIth Dynasty Tomb of Antefoker at Thebes,⁴ but female acrobatic

Egyptian
female
acrobats
at dances
and
funerals.

¹ Tumblers are seen in connexion with bull sports on a Cappadocian cylinder of the latter half of the Third Millennium B.C. (see *P. of M.*, iii, p. 205, and Pinches, *Liv. Ann. of Archaeology and Anthropology*, i, p. 76 seqq., no. 23, with Prof. Sayce's remarks).

² *P. of M.*, i, p. 694, Fig. 514 (cf. iii, p. 218, Fig. 149, and p. 219, Fig. 152 (Zakro)).

³ Bunsen, *Egypt's Place in Universal History* (Cottrell's translation edited by Birch), i, p. 507, no. 34. In no. 35 a female figure of a tumbler is also given as a hieroglyph, but there

wrongly taken for the arched form of the Goddess of heaven.

⁴ For that of the Tomb of Antefoker see N. de Garis Davies, *Bull. Metr. Mus.*, N.Y. Suppl., March, 1918, p. 62, Fig. 14. Cf., too, the examples of women acrobats given by Mr. Davies in the *Bulletin* of Feb. 1928, p. 62, Fig. 4; p. 65, Fig. 7; p. 68, Fig. 11; p. 69, Fig. 13, and p. 70, Fig. 14. A fine late painting of a female acrobat appears on an *ostrakon* of the Turin Museum (Maspero, *Égypte*) in *Ars Una*, p. 156, Fig. 287.

performers were more in vogue at Egyptian dances. These are depicted naked except for the loin cloth, and with long falling hair, an essential feature for the expression of movement and acrobatic pose (Fig. 452, *a, b, c*), which recalls the similar expedient of Minoan artists in representing cowboy feats and the downward course of divinities. They not only attended social gatherings and banquets, but joined ceremonially in religious processions, and formed part of the trained staff of the temple, performing in every 'proper burial'.¹ Figures of such women tumblers appear on the walls of tombs and in the courts and colonnades of temples.²

Male
tumblers
of *Iliad*.

That the male tumblers recorded in the *Iliad* stood in direct succession to those of the Minoan world is the more probable when we remember the traditional dance of the Knossian followers of the Delphinian Apollo,³ fresh landed at the 'holy haven' of Delphi, on his way to his new sanctuary of the 'Mantic chasm'. The acrobatic female performers, indeed, who attended the Greek banquets of later times, seem to have been taken from Egyptian models, and were attired in the same scant fashion. But they had now lost all traces of their religious connexion, and had become a mere accessory of luxurious junketings, sensational touches being added, such as a stage set with the blades of swords.⁴

Later
Greek
sensational
class.

There is a wide difference between such a setting and the flower-topped shoots of Cretan meadows, amongst which the tumbling youths are seen performing on the gem from Knossos.

Flat Cylinder illustrating Fable of 'The Goat and the Dog'.

Goat and
dog on
flat cylinder.

An intaglio (Fig. 453 and Suppl. Pl. LIV, *g*) on a seal-stone of the same flat cylinder class—a very beautiful bluish-white translucent agate, from the important Minoan site of Arkhanes, inland of Knossos⁵—may be taken to complete the illustration of this group. Its free and picturesque style—though the execution is somewhat hasty in places—clearly marks it as belonging to the great Transitional Age. It is best assigned to M. M. III.

Illustration
of
Fable.

This gem belongs to an otherwise unexampled class, for it seems

¹ See Davies, *Bulletin*, &c., Feb., 1928, p. 68.

² As at Luxor and Deir el Bahri.

³ Compare my observations in *P. of M.*, ii, Pt. II, p. 841.

⁴ See Athenaeus' account (*Lib.* iv, c. 3) of the wedding banquet of the Macedonian Karanos, where women acrobats make their

entry—*θαυματοποιῶναι γυναῖκες, εἰς ξύβην ἐκβαρτῶσαι.*)

⁵ It was acquired by me at Athens together with a small series of bead-seals—several of them clearly Cretan in character and including specimens of early 'prisms' and signet seals—collected on the spot by a native of Arkhanes,

actually to illustrate, in a skilfully epitomized shape, a homely fable of some native Aesop, the subject being an encounter of a hunting dog with a Cretan wild-goat or *agrimì*. The goat looks down from a rock ledge, ready to butt the hound should he bound higher. The dog stands below, on the stony flat, with his body thrown back, and supported by his outstretched fore-paws, as if in arrested course—while, with head upraised and open mouth, he barks at his adversary immediately above him.

The concluding part of the dialogue and the moral—to adopt the familiar style of the fables—seem to have been much as follows:

'Bark away!' mocked the wild-goat. 'I had to flee from you over the level country, since you have the better of me with your teeth. Now I am on my native rocks,—just come within reach of my horns!'

'The story shows that each is master in his own home.'

It is interesting to note that the scene of two animals, one on the ground below, the other perched on a rocky height—finds a real parallel in one of the fables that actually bear Aesop's name. In the 'Lamb and the Wolf,'¹ a lamb, standing on an eminence—*ἐφ' ὑψηλοῦ τόπου*—heaps insults on a passing wolf below. The Wolf replies, 'It is not you who are insulting me but the stronghold (*πύργος*) on which you stand.' The moral drawn in that case is that insults are endured from the weak when they have been inflicted by those in a higher position.

The lesson there inculcated is of a more subtle kind. It is less primitive and smacks of Oriental social conditions. General tradition, indeed, brings Aesop—about whose works in their original form we know so little—from the East Aegean shores, and the class of fables in which animals take part, finds its greatest vogue and earliest known sources in Eastern countries such as Persia and India. In Minoan Crete, with its manifold traces of early Anatolian relationship, such beast stories, embodying folk wisdom, may well have had an early vogue. The beast actors of the Ur inlays² now supply an early Sumerian analogy. The particular illustration afforded by the gem in which the principal part is played by the native *agrimì* in a rock-set scene, is, however, racy of the Cretan soil.



FIG. 453. FLAT CYLINDER OF BLUE CHALCEDONY, ARKHANES: FABLE OF WILD-GOAT AND DOG.

Oriental character of animal fables.

¹ *Méthoi Aisótopou*, cxliii (1842 edition, p. 120).

² See Woolley, *Ur Excavations*, ii, Pl. 105. The fox appears as servant of the lion, the ass plays

the lyre. On a clay fragment from Dschocha is the beginning of what seems to be a fable about a wounded fox. (Weidner, *OLZ.*, xvi, 306.)

Gold Signet-rings.

Gold
Signet-
rings.

It is impossible to separate the Art of the engraver of bead-seals and signet-rings, whether in gold or inferior metals, from that of the gem engravers, though the material favours more microscopic work, and for that reason—as in the case of the 'Ring of Nestor'—a greater multiplication of figures. Their bezels were engraved with essentially the same tools, though

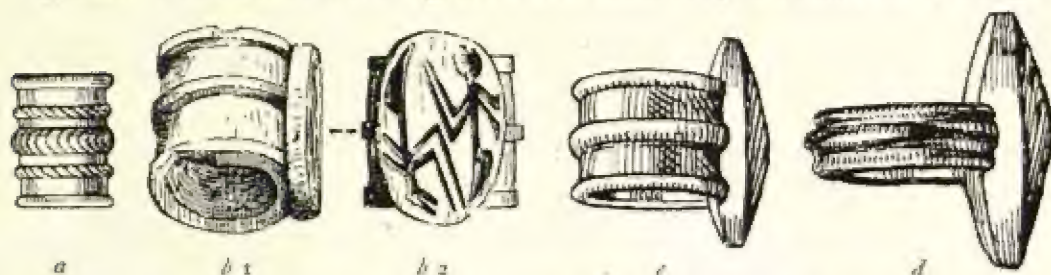


FIG. 454. EVOLUTION OF TYPE OF MINOAN SIGNET-RING FROM BEAD WITH ENGRAVED FACET: *a*, TUBULAR GOLD BEAD; *b* 1, 2, IVORY SEAL, PLATANOS (M.M. Ia); *c*, IDEAL INTERMEDIATE TYPE; *d*, MINOAN SIGNET-RING.

the tubular drill may have been less, and the fine point more in request. Gold beads of the amygdaloid and the 'elongated' bead-shaped forms, as well as that of 'flat cylinders', were equally used as fields for intaglio designs. The bezels of certain early gold rings also at times take the round, bossed form of lentoid bead-seals. A signet-ring of this form, engraved with a linear inscription of Class A, occurred in a tomb of the Knossian Cemetery of Mavro Spelio.¹ Another Cretan specimen in the finest M. M. III style, sub-oval in outline, is given in Suppl. Pl. LIV, *i*. Two *agrimis* here appear in the act of coition.²

Evolution
of Minoan
ring-
types.

It is the oval bezel—often considerably elongated—set at right angles to the hoop, that is the most characteristic feature of Minoan rings. This feature, indeed, except for some Chinese specimens, and certain dependent types, including—strangely enough—an Anglo-Saxon variety,³ seems to be

¹ See *P. of M.*, ii, Pt. II, p. 557. Fig. 352, and cf. E. J. Forsdyke, *The Mavro Spelio Cemetery at Knossos, B.S.A.*, xxxiii (1926-27), Pl. XIX, pp. 284, 285, and Fig. 37, v.

² *B.M. Cat. Ancient Rings, &c.*, p. 4, no. 14, from Crete. Mean inner diam. 13 mm. Two examples were found at Sphoungaras, one a bronze ring, the other of lead (E. H. Hall, *Excav. in E. Crete, &c.*, *Pennsylv. Mus. Publications* (1912), pp. 68, 69, Figs. 43 A and 44). Diam. of both, 10 mm.

³ The Chinese type of silver finger-ring with the bezel at right angles to the hoop reappears among Anglo-Saxon forms, as is shown by a ring from Ixworth, Suffolk, in Sir John Evans's Collection, now in the Ashmolean Museum. There it takes its place among elements derived by trade routes from Central Asia and the Permian regions to the Baltic. The possibility remains that this Asiatic group was, in some obscure way, derived from the Minoan. The same type extends to Tibet.

unique among the finger-rings of both the Ancient and the Modern World. In the Minoan case, as already shown, this peculiarity is explained by the origin of the Minoan form from a type of perforated bead for suspension, with an engraved facet. This form of bead is of Early Minoan date,¹ and the process of evolution by which it gave origin to the signet-ring is here once more illustrated in Fig. 454.² This derivation accounts for the fact, otherwise unexplained, that many of the later Minoan signet-rings are provided with hoops too small to fit the finger. Fundamentally they were seals for suspension.

It will be seen from the series given in Fig. 454—including the ideal type *c*—that the ivory bead-seal from a primitive *tholos* ossuary of Mesarà,³ with its reversed figures of ants, presents three rounded ridges, which still survive in the advanced ring-type *d*. From two perforations in the loop of this ivory bead-seal it is almost certain that it was originally coated with gold plates.

Probably the earliest example of an actual finger-ring of this class preserved to us is one that has been contained in one of the sepulchral jars of the Sphoungaras Cemetery in East Crete, which presents the unique peculiarity of having been set with a crystal intaglio (Fig. 455).⁴ The design, which is of a purely ornamental character, shows a cross-hatched background, akin to the network often seen on M. M. II signets. Its date indeed can hardly be later than the earlier phase of M. M. III. In this case the hoop consists of two rings.

Although, as shown above, it seems possible to trace the origin of the typical Minoan signet-ring from a form of gold-plated bead-seal of ivory or soft stone of E. M. III date, the earlier links in the connexion are still to seek. The first record of the fully developed type of gold signet-rings is supplied by seal impressions belonging to the latest Middle Minoan



FIG. 455. GOLD SIGNET-RING SET WITH CRYSTAL BEZEL (M.M. III): SPHOUNGARAS ($\frac{2}{3}$).

Sphoungaras ring set with crystal intaglio.

Signet-ring impressions of Transitional M.M. III Age.

¹ This ivory bead-seal is illustrated by Xanthudides, *Vaulted Tombs of Mesarà* (Transl. Droop), Pl. IV, no. 646 and p. 80, where the insects are called 'grasshoppers'. The reversed position of the ants recalls a familiar feature of VIIIth Dynasty 'button seals'.

² See *P. of M.*, iii, p. 139 seqq. and Fig. 90, *a-d*, and cf. A. E., *Ring of Nestor*, &c. (Macmillans, 1925), p. 47-8.

³ From *Tholos B* at Koumàsa. Xanthudides, *Vaulted Tombs of Mesarà* (Transl. Droop), Pl. IV, 646. On p. 30 it is mentioned that 'the hole is too small for it to go on even a child's finger'. See, too, my remarks in the Preface to that work, p. vii, on the importance of this object in relation to the later 'ring' types.

⁴ E. H. Hall, *Sphoungaras*, &c., p. 69, Fig. 43 B.

phase or the initial stage of L. M. I. Such are those represented by certain clay sealings from Zakro and Hagia Triada and by the clay matrix of Knossos.¹

There can be little doubt that these impressions belong to signet-rings of this kind, and show that they were already in vogue in the great transi-

tional M. M. III—

L. M. I *a* phase. It

is difficult, however,

on grounds of style,

to assign any exist-

ing specimens of

the rings them-

selves to an earlier

date than a fairly

advanced stage of

L. M. I *a*. Among

these may be rec-

koned the well-known example from Mycenae, where the Goddess of the

Double-Axe is seated beneath her sacred fruit tree. To the same

approximate date, too, may be referred that, so fully developed in its

dramatic expression, depicting the double scene of mourning and ecstatic

frenzy beside the little grave enclosure.² A kindred spirit breathes in the

design—combining similar ecstatic possession with a mourning figure on a

shield—seen on the gold signet-ring from the Vapheio Tomb,³ and in that

case dated to L. M. I *b*. To this group also belong the crowded scenes on

the 'Ring of Nestor',⁴ and those of the gold signet-ring,—similar in workman-

ship, and identical as regards the decorative beading of the hoop—which led

to the discovery of the 'Temple-Tomb of Minos'.⁵ On these latter examples

we have to do with successive tableaux set together on the same field, and the

suggestion afforded by fresco panels is not far to seek. In the case of the

'Ring of Nestor', indeed, it has warranted a coloured restoration on the lines

of the miniature wall-paintings.⁶

From the beginning these signet-types are associated with religious

subjects like the above, including, besides actual scenes of adoration,

episodes of the agonistic sports of the arena, held in honour of the Goddess.

¹ See *P. of M.*, ii, Pt. II, p. 767, Fig. 498.

² See especially *P. of M.*, iii, pp. 142, 143 and Fig. 93.

³ 'Eph. 'Apx., 1889, Pl. X, p. 39; *P. of M.*, ii, p. 140 seqq., Figs. 91 and 92 (chrysalis

emblem); and cf. A. E., *Myc. Tree and Pillar Worship*, p. 78 seqq., and Fig. 52.

⁴ *P. of M.*, iii, p. 146 seqq., and Fig. 95.

⁵ See below, p. 963, seqq.

⁶ *Ib.*, p. 157, Coloured Plate XXA.

Speci-
mens
known
from L. M.
I *a* on-
wards.

Dramatic
religious
scenes.



FIG. 456 *a, b*. CLAY SEAL IMPRESSIONS; *a*, PROBABLY OF A SIGNET-RING SHOWING SCENES OF COMBAT. FROM HAGIA TRIADA.

It has been suggested in a former Section of this Work that the pugilistic bouts illustrated by impressions—apparently of signet-rings of the early class—were later adapted by the Mainland Art to episodes of heroic warfare such as were later recorded in Greek epic.¹ But warlike scenes were not altogether wanting on Cretan intaglios of the transitional M. M. III-L. M. I a phase. On two seal impressions from Hagia Triada, one of which (a) seems to have been produced by a signet of this early class, episodes of actual combat are certainly depicted (Fig. 456).² A Bowman in the act of aiming an arrow, apparently of the same martial class, occurs on another contemporary seal impression from the same site.³ Later on, in the last palatial Age of Knossos, military types are often represented.

Warlike scenes not unknown on Cretan signets.

The prevailing character of these signet-rings was, however, throughout religious, and, indeed, our knowledge of Minoan Cult is largely due to the illustrations they supply. These objects—which to the last retained in

many cases in their narrow hoop their original function of pendant bead-seals rather than of finger-rings—stood, as we have seen, in a peculiar personal relation to their owners, a relation that extended beyond the grave.



a



b

FIG. 457. MINOAN VERSIONS OF OEDIPUS SLAYING THE SPHINX (a) AND (b) HIS FATHER LAIOS ON GOLD BEAD-SEALS OF 'ELONGATED OVAL' CLASS, THISBÊ.

The Gold Bead-seals of 'Elongated Amygdaloid' Type from the Thisbê Tomb.

Amongst all the gold bead-seals the most interesting are those that must actually be taken to reproduce heroic scenes, or even records of historic episodes of more recent date. Where, as in the case of gold flat cylinders from the Fourth Mycenae Shaft Grave,⁴ and of other intaglio types, a warrior

Gold bead-seals of 'elongated' type from Thisbê Treasure.

¹ *P. of M.*, i, p. 691 seqq.

² First illustrated by Doro Levi, *Le Cretule di Hagia Triada* (*Ann. della r. Scuola di*

Atene, 8, 1929), p. 57, Figs. 130, 131.

³ *Ib.*, p. 56, Fig. 128.

⁴ See *P. of M.*, iii, p. 125, Fig. 78.

Historic
scenes of
combat:
Peri-
phetes.

Oedipus
story.

is shown attacking a lion, no clue has been left as to the personage depicted. On a sardonix amygdaloid from the Third Grave, however, the combat between two warriors, one falling back on his shield, certainly corresponds in a remarkable way with the death of Periphetes, as described in the *Iliad*.¹ On the other hand, two of the large gold beads of an 'elongated oval' class, from the Thisbê Treasure supply, what is clearly a Minoan version of the Oedipus story. In the one case (Fig. 457, *a*) we see the hero as a young prince, attacking a Sphinx with a dirk or short sword.² In the other (Fig. 457, *b*) we can hardly fail to recognize the same youthful personage waylaying Laios in the 'hollow way' (indicated by the rocks above), both personages being armed with bows and arrows.³ That the find-spot of these engraved jewels was the harbour town on the Gulf of Cadmean Thebes adds special significance to their subjects. The anticipation of the story of Oedipus slaying the Sphinx—a Greek term for 'the Strangler'—reminds us that the Kadmeia themselves looked forth on its ancient abode, the *Sphingion Oros*. May not some more primitive form of the monster have haunted those wilds in the folk-lore of an indigenous Greek population long before it was assimilated to the Egyptianizing creation of Minoan Art?

Slaughter
of Kly-
temnestra

But the third similar intaglio from the same sepulchral deposit (Fig. 458) exhibits a subject that seems actually to illustrate the crowning



FIG. 458. SCENE APPARENTLY ILLUSTRATING THE MURDER OF AEGISTHOS AND KLYTEMNESTRA BY ORESTES, ON GOLD BEAD-SEAL OF ELONGATED CLASS: THISBÊ.



FIG. 459. TRAGIC SCENE ON GOLD BEAD-SEAL FROM THISBÊ: PHOTOGRAPHED FROM THE OBJECT ITSELF.

¹ Homer, *Il.*, xv, 645 seqq. See A. E. (*J.H.S.*, xxxii), pp. 283, 284; and cf. *P. of M.*, iii, Fig. 80, *a* (facing p. 126). The type was imitated on a Hellenistic ivory ring-bezel from Kydonia (*ib.*, Fig. 80, *b*).

² See *P. of M.*, iii, pp. 416 seqq. and p. 418, Fig. 282, and cf. A. E., *Ring of Nestor*, &c.,

and *Sepulchral Treasure of Gold Signet-rings and Bead-seals from Thisbê, Boeotia* (Macmillans, 1925), p. 27 seqq., and Figs. 31, 32.

³ *ib.*, p. 31 seqq. and Figs. 33, 34. For the baseless criticism of the chariot design in *Arethuse* (1926, p. 63 seqq.) see below, pp. 817, 818.

tragedy of the house of Atreus.¹ The warrior here—equivalent to Orestes the avenger of his father, the murdered Agamemnon—has clearly already dealt a mortal stroke at Aigisthos—seen tumbling backwards—and hastens to dispatch Klytemnestra, who hurries, richly bedizened, to the left, endeavouring to escape, and in an attitude of abject fright. The scene, naïve in its composition, but full of violent action, itself finds no echo in the later Greek version of the same episode, as depicted, for instance, on a series of red-figure vases. But its correspondence with an outstanding tragedy of ancient tradition is so close that it is difficult not to recognize here an actual record of it by the Minoan engraver. The rich costume of the woman itself proclaims a personage of the highest rank, and the undignified overthrow of her male partner fits in well with the Homeric epithet of *ἀναλκις*—the ‘impotent’ or ‘craven’—applied to Aigisthos. The intaglio itself forms a pendant to the other pair, equally illustrative of gestes belonging to the heroic cycle of early Greece.

and
Aigisthos
by
Orestes.

Evidences of Genuineness of Thisbê Jewels.

The remarkable character of the latter subject, coupled with those presenting a hero to be naturally identified with Oedipus, has probably done more than anything else to induce certain critics—who in no case had examined the originals—to throw doubt on the whole series of the Thisbê jewels. So persistent, indeed, has been this attitude that, though in the course of this Work controversy has, where possible, been avoided, a few words may not be out of place.

My own opinion—at the back of which stand at any rate some sixty years of *expertise* in ancient seals and intaglios, and an exhaustive acquaintance with Minoan artistic work in all its manifestations—has never wavered as to the entire genuineness of the series as an indivisible whole. This view was fully endorsed, as the result of independent study, by such a prominent authority on Minoan remains as the late Mr. R. B. Seager.² But the genuineness of the objects, as pointed out above, subsequently received signal confirmation from the interesting discovery that what had at first appeared to be an unique scene of ritual pouring from an ewer into a two-handled jar of a special shape, presented by one of the Thisbê bead-seals, was paralleled by a sealing brought to light eight years later from a palatial deposit of Knossos.³

¹ For a fuller account see *Ib.*, p. 38 seqq., and Figs. 38, 39.

² Their genuineness was independently confirmed by the well-known archaeologist, Mr. John Marshall.

³ See above, pp. 451, 452, and p. 452, n. 1;

and cf. A. E., *Ring of Nestor*, &c. (Macmillans, 1925, and *J. H. S.* xlv), pp. 18–20. How, too, could a forger have known of the Boeotian touch in the spear-shaft with ribbon-like attachments (*op. cit.*, p. 26, Fig. 29)? Where indeed did he acquire the subile knowledge that the

The most gifted forger could hardly be credited with powers of second sight and of even a prophetic knowledge of later discovery!

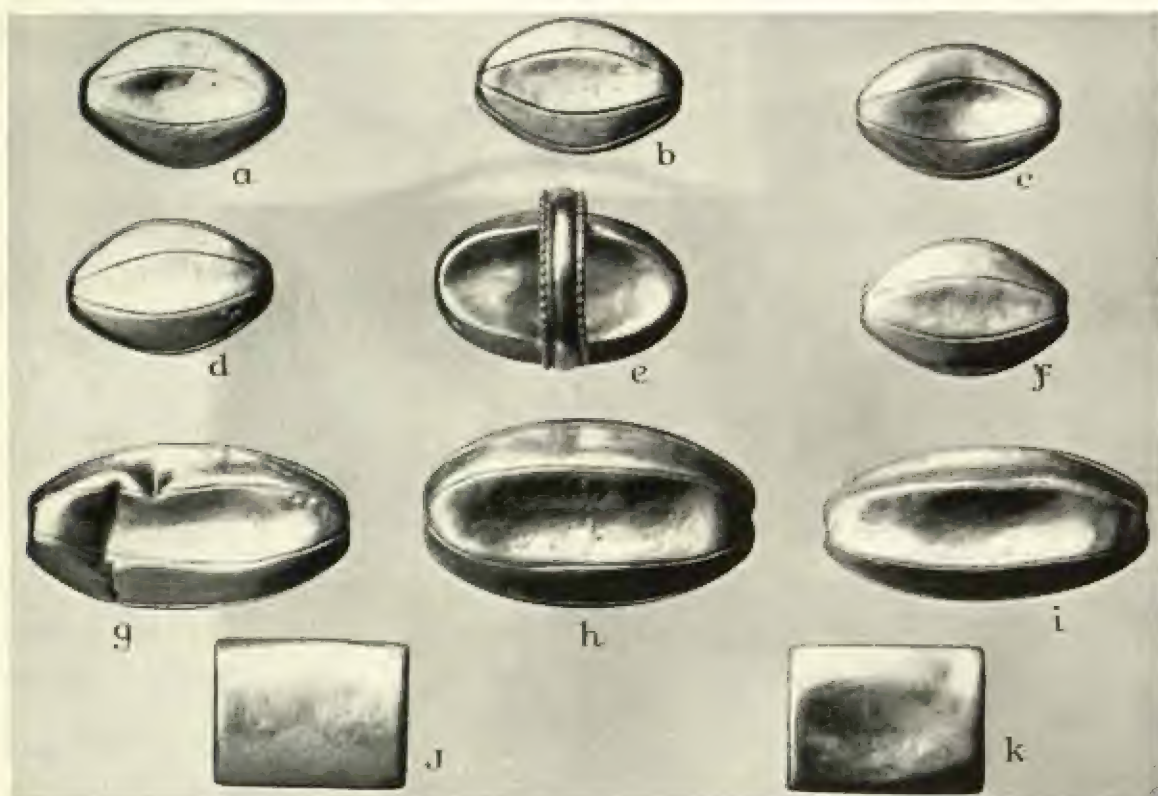


FIG. 460. BACK VIEW OF BEAD-SEALS AND RING FROM THESBE FIND SHOWING THE EFFECTS OF THE IMPACT OR PRESSURE OF FALLEN MATERIALS ON THEIR BACKS. *a*, LIBATION SCENE (p. 451, FIG. 376, ABOVE). *b*, SPRING GODDESS HELPED TO RISE FROM EARTH (*R. of Nest.*, p. 15). *c*, GODDESS HUNTING STAG. *d*, GODDESS BETWEEN WATERFOWL. *e*, DRINK-OFFERING TO SEATED GODDESS. *f*, HUNTSMAN AND BOAR. *g*, 'ELONGATED' BEAD-SEAL: 'OEDIPUS AND SPHINX'. *h*, DO. 'OEDIPUS AND LAIOS' IN CHARIOT. *i*, 'AIGISTHOS SLAYING AGAMEMNON AND KLYTEMNESTRA'. *j*, FLAT CYLINDER: SCENE OF BULL-RING. *k*, DO. PRIESTLY 'MATADOR' AND BULL.

The objects said to have been found with the jewels—a number of which I saw associated with them in their owner's hands—were all of genuine Late Minoan fabric. The gold seals themselves are divided stylistically into two groups, three 'flattened cylinders', of slightly earlier fabric, and the remainder consisting originally of eleven pieces, presenting signs of similar fabric. But an interesting feature in the condition of the bead-seals is common to the whole series. They are in each case formed of a casing of gold plate on which the intaglios were executed, within which is a filling 'flat cylinders' required a slightly earlier style? amygdaloid types the grooving and facets of How, again, was he inspired to imitate on the L. M. Ia? (See above, p. 493).

of some other material that has not afforded a strong resistance to pressure.¹ The backs of the gold-plated beads thus show a greater or lesser amount of small depressions or blunt indentations—in the case of Fig. 460, *g*, a partial rupture of the plating. The general correspondence in condition is well brought out by the photographic reproductions in Fig. 460.² Of great interest is the fact that all, including *a*—as to the genuineness of which there can be no legitimate doubt—reflect the tradition of the grooved back characteristic of L. M. I *a* (see above, p. 493). The central section of this, being slightly embossed, has specially suffered.

Omne ignotum pro falso is itself a dangerous motto in the Minoan field.

Aigisthos, and the Pictorial Illustrations of History or Recent Traditions by Minoan Artists.

If, as there seems to be good reason for supposing, the scene depicted on the bead-seals illustrated in Figs. 458, 459, does in fact refer to the traditional story of the murder of Agamemnon and Klytemnestra, the name of Aigisthos, the villain of the piece, is of great interest, as showing a direct affinity with the most characteristic of all old Cretan and kindred Philistine and Anatolian forms that has been preserved to us.³ The engraved bead, here ascribed to the early part of the Fifteenth Century B.C., would thus supply an association of the name of Aigisthos with a prince of Mainland Greece about the time of the appearance of the envoys of Keftiu on Egyptian monuments. It may therefore be something more than a coincidence that under the form *Akashon*—reasonably identified with the Philistine Akish—it appears on the 'London Tablet' of XVIIIth Dynasty date as a representative personal name of Keftiu.

Anatolian and Philistine affinity of name of Aigisthos.

Such a reference to more or less current events has already been illustrated by the siege scene on the silver '*rhyton*', itself in keeping with similar Egyptian records, and was as much a feature of Minoan Art as the instantaneous sketches of birds and animals. The attitude of mind on the part of the artist is essentially modern and far removed from the inhibitions of the great days of Classical Greek Art, though quite intelligible to a Roman.

Historical records by Minoan artists.

Pictorial scenes like the above may at times be recognized as the reflection of greater works existing on the Palace walls. In the preceding Volume the elaborate illustration of the Minoan Underworld supplied by

¹ The beads seem to have fallen face downwards.

² The hoop of the ring *e* was much pressed down.

³ See *Ring of Nestor*, &c., pp. 40, 41. *Achish*

appears in the LXX as 'Αχχis and 'Αχχίος. An *Ikistisu*, king of Idalion is mentioned among Cyprian princes tributary to Esarhaddon and Assurbanipal and *Ikausa* is the Assyrian form of a contemporary king of Ekron.

the 'Ring of Nestor' has been made the basis of an actual retranslation of the scenes in colour, so as to restore the equivalent of a fresco panel in the 'Miniature' style.¹ It has been shown that a whole group of



FIG. 461. *a*, JASPER LENTOID FROM KYDONIA SHOWING TIRING SCENE. FEMALE FIGURE (PROBABLY THE MINOAN GODDESS) SEATED ON PILLAR AND TENDED BY TWO HANDMAIDENS; *b*, RESTORATION OF DESIGN BY GILLIÉRON, FILS.

bull-grappling or bull-catching scenes on signets were taken over from prototypes in the greater Art, such as the painted stucco relief of the Northern Entrance Porticoes at Knossos, and of which the *repoussé* compositions on the Vapheio Cups form a fuller record. In

many cases, moreover, the architectonic source of sphragistic motives is actually indicated by the 'triple gradation' beneath them, sometimes with the separate blocks of the masonry marked out.

Toilette Scene of M. M. III Fresco reflected on Gem.

To the suggestions already made of such influences in the course of this work may be added the evidence afforded by a curious, though sketchily engraved and unfortunately somewhat worn design on a jasper lentoid from the neighbourhood of Kydonia (Fig. 461). As shown by the restored drawing, Fig. 461, *b*, it was evidently intended to depict a toilette scene such as those depicted in the M. M. III wall-painting of the 'Ladies in Blue',² or the more or less contemporary 'Jewel Fresco',³ where a male hand is seen holding the end of a robe, apparently attached to a beaded necklace. A part of one of the black tresses of its wearer is also visible.

Some tiring process of the same kind must be recognized in the case of this intaglio. This is being performed for the central figure by the two handmaidens at her side. From the short pillar—of baetylic significance—on which the personage thus adorned is seated, she may well be regarded as the Minoan Goddess herself, also seen, in other cases, attended by two handmaidens.

¹ See *P. of M.*, iii, p. 145 seqq., and Pl. XX, A.

² *P. of M.*, i, pp. 545-7, and Figs. 397, 398.

³ *P. of M.*, i, p. 526, Fig. 383, and cf. p. 312, Fig. 231. It has since been badly injured by Earthquake of 1926.

§ 106 A. INDIGENOUS SPHRAGISTIC TRADITION: LION AND BULL TYPE
OUTGROWTH OF DOG AND WILD-GOAT.

Sphragistic tradition indigenous to Crete; Early Nilotic and Egyptian prototypes at times traceable; Primitive pictorial motives; Potters' seals—owner playing draughts; Survival of type of seated rowers; Trussed wild-goats on pole—later version, trussed lion; Hunting of Cretan Wild-goats—hound leaping on wild-goat; Hound seizing stag's neck—Odysseus' brooch compared; Lion leaping on quarry—outgrowth of the indigenous types; First appearance of lion on primitive Cretan seals under Nilotic influences; Lion types in M. M. II of Mainland inspiration; Lions divine guardians; Lion seizing deer on Shaft Grave dagger blade; Fully developed scheme of lion leaping on quarry—Thisbê signet-ring; Oriental group contrasted with Minoan; Oriental scheme influenced by cylinder types—lion's hind-legs on ground; Lion and bull on jasper weight from Tell-el-Amarna; Exceptional Minoan groups with lion's hind-legs on ground; Examples of traditional scheme where lion leaps on victim's back—This scheme direct outgrowth of that of dog and Cretan goat; Reaction of sphragistic motives on greater Art; Lion and bull on Minoan ivories—Enkomi mirror handles; Minoan Colonial fabrics on Syrian and Cilician Coasts; 'Mino-Cilician' ceramic motive of lion and bull; Minoan influences on Assyrian Art; Lion and bull on Beirût scarab; Cypriot Greek, Ionian, and Phoenician versions; Coin-types; Early painted reliefs of Akropolis, Athens; Later Greek versions, revival of Minoan type.

IT is important to observe that—apart from the influence of larger models, such as wall-paintings, on the more advanced class of signet types—there was an inherited tradition, going back to quite primitive models, which was proper to the seals themselves.

Sphragistic tradition indigenous to Crete.

This atavistic element is, in fact, well illustrated by the evolution above traced of the Minoan ring-type from what was originally a pendant bead-seal of a particular kind.

The unbroken indigenous pedigree of certain sphragistic motives is of great utility in helping us to ascertain how far they are to be regarded as the genuine outcome of a native Minoan school, or how far they may be due to extraneous influences.

This must not, indeed, leave out of count the consideration that, at the

Primitive
Nilotic
and
Egyptian
proto-
types
at times
traceable.

back of the primitive prototypes themselves, foreign influences from beyond the Libyan Sea or still farther afield were already at work. It has, indeed, been already shown that the 'double sickle' motive and certain reversed types of lion and even some 'antithetic' human subjects stand in relation to a special class of Nilotic 'button-seals'—having affinities farther East—that belong to the disturbed Egyptian phase that follows on the Sixth Dynasty.¹ The 'key' pattern, and even the Labyrinth itself as a decorative type, seem to have reached Crete by the same route,² and primitive forerunners of the Minotaur may be linked with the Man-bull of Eabani by rude intermediate forms from the same Nilotic source.

The couchant lion of a notable Early Minoan ivory seal from Mesarà has been shown above³ to reproduce the typical features of First Dynasty gaming pieces. The dog-faced ape was also taken over and the sacred hawk converted into a dove. So, too, in the succession of animals met with on some of the ivory seals we may certainly recognize a reflection of processional lions on protodynastic Egyptian cylinders.

Survival of Early Minoan Motives.

Survival
of type
showing
seated
rowers.

Some Early Minoan motives can be shown to have had a very long history. An instance of this is supplied by a curious type of which more than one specimen is known. This displays a series of figures in a crouched attitude which, on the evidence of more advanced examples, must be taken to be rowers. A primitive prism seal of steatite of the closing Early Minoan phase from East Central Crete shows three such figures rudely executed on one face while on another are seen two ships (Fig. 462, *b, c*).⁴ Although the intermediate stages are wanting, it is clear that the tradition of a similar motive is preserved in a seal type of which numerous fragmentary impressions were found in a palatial deposit at Knossos,



FIG. 462 *a, b, c*. THREE-SIDED BEAD-SEAL OF STEATITE.

¹ See *P. of M.*, i, p. 122 seqq., and Figs. 92, 93 A, B.

² *Ib.*, pp. 121, 122, Figs. 90, 91, and pp. 358, 359, Figs. 258, 259.

³ See above, p. 486 and Figs. 406, 407.

⁴ *Ib.*, p. 120, Fig. 89. The 'equine animal' on the first face is probably an ass.

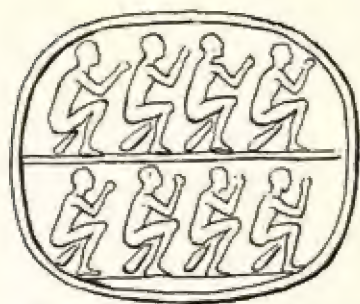


FIG. 463. SEALING SHOWING ROWERS FROM KNOSSOS: TYPE RECONSTITUTED FROM FRAGMENTS.

of M. M. III-L. M. I date. A reconstitution of the design from overlapping clay fragments there found is given in Fig. 463,¹ and it will be seen that the blades of the oars held by the squatting figures are in this case also represented. Similar impressions of clay sealings were also found in the contemporary Zakro Hoard.²

Indigenous Motives of Pictorial Character.

Original compositions of a pictorial nature make their appearance betimes on Early Minoan seals. Such we may recognize in the repeated designs of the potters of both sexes—whose craft was already of pre-eminent importance in the island—carrying their pots suspended from a pole. In

Cretan
potter
playing
Egyptian
draughts.



FIG. 464. THREE-SIDED SEAL-STONE OF STEATITE (E. M. III), SHOWING 1, POTTER MOULDING LARGE JAR; 2, PLAYING DRAUGHTS (FOR BOARD *f*, Fig. 465, *a*, *b*); 3, TWO DOGS CROSSED.

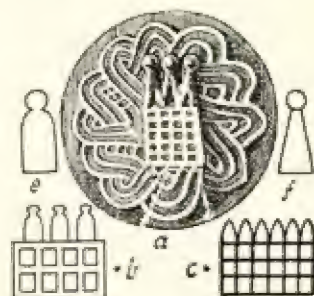


FIG. 465. *a*, DRAUGHTBOARD AND PIECE ON E. M. III IVORY SIGNET (FRACTURE RESTORED); *b*, *c*, EGYPTIAN DRAUGHTBOARD SIGN (*MEN*); *d*, *e*, EGYPTIAN PIECES.

other designs the vessel is set within the oven. Of exceptional interest, again, is the potter—who, on another face of the seal-stone is seen

¹ A. E., *Knossos Report*, 1902 (*B.S.A.*, vii), p. 102. These fragments belonged to the earlier deposit of seal impressions found at the West end of the E.-W. Corridor, extending under the later blocking of the entrance to the Corridor of the Bays.

² Hogarth, *J.H.S.*, xxii (1902), Pl. IV, 16 and p. 79. Five specimens were found, none

of them in good condition. Hogarth calls them 'exact replicas of the Knossian type'. Some other Zakro types show a similar correspondence, and the seal impressions found on the site of the Harbour Town of Knossos afford a further proof of a maritime connexion (*P. of M.*, ii, pt. I, pp. 254-5, and Fig. 149).

at work on a tall jar—seated beneath a tree and relaxing himself with a game of draughts on a table in front (Fig. 464, 1, 2). Beneath his



FIG. 466. E.M. III BEAD-SEAL: MALLIA.



FIG. 468. CORNELIAN LENTOID FROM CRETE: MINOAN GENIUS AS HUNTER CARRYING LIONS ON POLE.



FIG. 467. SEAL IMPRESSION (M.M. III-L.M. I a): H. TRIADA.

Trussed wild-goats on pole.

Lion trussed on later sealing.

Middle Minoan phase, though the potters themselves entirely vanish from the scene. An interesting 'tabloid' bead from Mallia,¹ however, engraved on four sides, depicts a huntsman bearing on a pole that rests on his shoulder two *agrimis* strung up with crossed fore and hind legs (Fig. 466) in the same way as we see potters on other early bead-seals carrying their vessels. For this method of transporting the quarry it is possible to cite a considerably later sphragistic example. This occurs on a clay impression of a gem of the 'flat cylinder' type from Zakro, belonging to the transitional M. M. III b-L. M. I a epoch,² on which two men are depicted in the act of trussing for suspension the legs of a huge lion (Fig. 467). Here the transference of the subject from the indigenous wild-goat to the greater beast, of Mainland range, is itself very characteristic of the more advanced stage of Minoan Art. As a supplement to this the Cretan lentoid,

¹ From Mr. R. B. Seager's Collection; now A. E.

² First published by Doro Levi, *Le Cretule di Haghia Triada e di Zakro* (*Annuario della r. Scuola Archeologica di Atene, &c.*, 1929), p. 116 [182], Fig. 231, and Pl. XVIII. It is there compared with the intaglio on a jasper

lentoid from the Vapheio Tomb (*Εφ. 'Αρχ.*, 1889, Pl. X, 38; Furtwängler, *A. G.*, ii, Fig. 13). The same operation is being carried out, but the lion's legs are not yet bound together. The Vapheio gem would be somewhat later in date than the H. Triada impression.

hand is a draughts man of the conical Egyptian form (Fig. 465, b, c, e, f), preserved in use at Knossos till the latest days of the Palace. The board and men are still better shown on an ivory signet of M. M. III from Hagia Triada (Fig. 465, a).

The crossed dogs (Fig. 464, 3) also compare with later Minoan animal types on seals.

The pots play a prominent part in the hieroglyphic seals of the succeeding

Fig. 468, is here repeated, on which a Minoan Genius bears two lions on a pole as trophies of the chase.

The Hunting of Cretan Wild-goats.

Goats or other animals of the chase occur on seal-stones of the primitive class—sometimes running¹—but it is not till the early part of the first

Hunting
of wild-
goats.



FIG. 469. BASE OF IVORY HALF CYLINDER SHOWING HUNTING SCENE (M. M. Ia).

Middle Minoan Period that a regular hunting-scene makes its appearance. On the ivory 'half cylinder' from Knossos, Fig. 469, huntsman and hound are seen pursuing the wild-goat,² behind which is a tree, symbolical of the wooded hillside.

An interesting pendant to this is supplied by the somewhat later intaglio illustrated above,³ from Rethymnos, and executed in a more lively style. Upon this stone, which represents an early example of the 'flat cylinder' class, a similar tree appears behind, but there was not room in the field for huntsman and hound, and the idea of pursuit is in this case artistically conveyed by the turning back of the head of the galloping animal. A comparison of the designs cannot but suggest the near relation of these two presentments of the scene.

But at the epoch, M. M. II, to which the latter belongs, a version of the design begins to appear which brings out, in a condensed form suitable for a round or oval field, the crowning episode of the chase, the actual seizure of the quarry by the pursuing hound or beast of prey. An illustration of this—like the early 'flat cylinder', Fig. 439, to be placed within the limits of the M. M. II Period—is supplied by the crystal bead-seal, Fig. 470, found at Sfaka in Siteia, where a collared hunting-dog is seen actually leaping on the coursing wild-goat and bearing him to the ground.⁴ On the reverse side of the gem is a boar.

Hound
leaping
on the
goat.

¹ E.g. A. E., *Cretan Pictographs*, &c., p. 71 (*J.H.S.*, p. 340), Fig. 60. Dark-grey steatite prism; Central Crete.

² *P. of M.*, i, p. 197, Fig. 145.

³ See above, p. 500, Fig. 439, where it is ascribed to M. M. II.

⁴ See *P. of M.*, i, p. 275, Fig. 204, c. On pp. 564, 565, and Figs. 410, 411, illustrations

are given of the type (frequent on such seals) presenting the façade of a building, and of impressions of a broken specimen of the kind on the zone of a 'Medallion pithos' from the Royal Magazines at Knossos of M. M. III b date. Specimens of these 'flat-edged' lentoids in my collection show the transition to the ordinary lentoid form.

Some account has been already given of the special type of circular bead-seal on which this design occurs. It has been called the 'flat-sided lentoid'. Seen from above or below, its circular contour resembles the ordinary lentoid form. The edge, however, in its original shape as shown by this specimen is broad and flat. In style this example belongs to M. M. II.¹



FIG. 470. CRYSTAL LENTOID OF FLAT-SIDED CLASS.



FIG. 471. HAEMATITE LENTOID, E. CRETE: DOG SEIZING STAG.

Hound seizing stag's neck; Odysseus' brooch compared.

Similar designs are not infrequent on bead-seals of a somewhat later lentoid class.² On a haematite specimen of this kind from Eastern Crete, Fig. 471, the collared hound of Fig. 470 reappears springing on a stag's back and seizing his cervical vertebrae in his jaws. It is interesting to note that the inherent talismanic virtue of this seal-stone, as bearing on the chase, is here emphasized by two subsidiary details below that have nothing to do directly with the main episode. The little pillar here seen is of a baetylic class. The seated dog with his forelegs higher than his hind is really one of a pair of sacred animals such as we see them with their forelegs resting on an altar base.³ Though somewhat worn, the fine style of this intaglio points to an epoch not later than L. M. I b.⁴ The subject itself has a special interest since the tradition of it was taken over by the Poet of the *Odyssey* in his description of Odysseus' brooch,⁵ though it may safely be said that no *fibula* of the Age in which the Homeric poem was put together (unless, indeed, it be brought down to the Sixth or Seventh Century) was adapted for such an ornament. In that case the dog gripped a young dappled stag, gazing on it while the fawn writhed with its legs in the vain effort to escape.⁶

¹ See *P. of M.*, i, pp. 275, 276, Fig. 204, a, b, c.

² On a grey steatite lentoid seen by me at Piskokephali in Siteia in 1898, the leaping hound has not quite reached the back of the goat, which, however, has fallen on its knees.

³ See for instance p. 608, Fig. 597 A, g below.

⁴ This, too, was the time when the use of

haematite for seal-stones was most prevalent, due no doubt to strong Syrian influences.

⁵ See too, A. E., *The Minoan and Mycenaean Element in Hellenic Life* (J. H. S., xxxii), pp. 222, 223, and Fig. 4.

⁶ *Od.* xix. 228 seqq.:

ἐν προτέρῳσι πύδασσι κύνων ἔχε ποικίλον ἑλλόν,

δοσπαίροντα λαίων· τὸ δὲ θανατίζεσκον ἄπαντες,

Indication of Minoan Origin of the Well-known Type Depicting Lion leaping on Quarry.

But the evidence before us, illustrating the native origin of the scheme of the hound leaping on a wild-goat or a deer and bearing it down with his weight has an obvious relation to the better-known design in which the lion is the hunter.

Lion leaping on quarry outgrowth of indigenous types.

This latter motive has from the Classical point of view been traditionally regarded as the very embodiment of Oriental influence. Was not it, too, rather the artistic creation of Minoan Crete?

The date of the appearance of the fully evolved scheme under its purely indigenous aspect of a dog seizing a Cretan *agrimì*, as indicated by its occurrence on the flat-sided crystal lentoid, must go back at least to the lower limits of the Second Middle Minoan Period. In other words it can hardly be brought down later than the Eighteenth Century B.C. It is only at a distinctly later epoch, which can scarcely be earlier than the initial phase of the Late Minoan Age, that the lion, so generally associated with this scheme in later Art, first appears in connexion with this scheme.

Early Appearance of the Lion both in Relief and Intaglio in Connexion with Minoan Seals.

The first entry of the lion on the scene among the sphragistic elements of Crete itself goes back well into the Early Minoan Age. It supplies the form¹ as well as the subject of ivory seals, being one among a series of pre-dynastic and proto-dynastic elements, the evidence of which has been mostly forthcoming from the contents of the primitive *tholos* tombs of the Mesarà district.² So intensive there, indeed, are the Nilotic elements, as to lead almost perforce to the conclusion, developed in an earlier Section of this Work, that, over and above a still more remote prehistoric connexion between Crete and

First appearance of lion on primitive Cretan seals under Nilotic influences.

ὡς οἱ χρέουσι δόντες ὁ μὲν λάε νεβρὸν ἀπάγχου,

αὐτὰρ ὁ ἐκφυγεῖν μεμῶως ἥσπαιρε πόδεσσιν.

As noted, *op. cit.*, p. 282, the ascertained archaeological data forbid us to believe that a *fibula* thus decorated could have existed in the transitional Bronze to Iron Age epoch to which the *Odyssey* in its historic form apparently belongs. A further correction is needed of the description of the group itself. The picture of the hound 'strangling'

(ἀπάγχου) the young stag with his fore-paws is obviously an impossible one. Paws and claws were doubtless used to obtain an additional hold on the quarry. D. B. Monro (*Odyssey*, xiii-xxiv, p. 160) noted the difficulty. Here we have not any kind of 'strangling' but the paralyzing effect of the carnivore's teeth penetrating the vertebrae in such a way as to break the spinal cord.

¹ See above, p. 486, and Fig. 407.

² *P. of M.*, ii, Pt. I, p. 29 seqq.

the Delta, Mena's Conquest of Lower Egypt may have led to a settlement of this Southernmost Cretan region by immigrants belonging to the older stock.

The lions often appear following one another, according to the 'processional' arrangement noticeable in Egyptian works of the proto-dynastic Age.¹

In all these cases, however, the lion, though perhaps retaining some special religious significance and supplying a traditional element of seal decoration, is hardly more than an exotic reminiscence. It is impossible to suppose that the animal existed in a wild state in the Island. Neither does there seem to be any evidence of the appearance of a lion—even as a sphragistic type—on the contemporary three-sided steatite bead-seals of indigenous Cretan fabric.

By the second Middle Minoan Period, however, probably owing to the intimate contact with Mainland Greece then established, the lion takes an active place as a motive of prism seals in hard stones. These are sometimes associated with hieroglyphic signs of Class B on the other faces. On a four-sided red cornelian (without hieroglyphs) from near Arkhanes (Fig. 472) the animal is represented coursing at full gallop with his head turned back. In addition to this we find the facing lion's head surmounted by the sacral fleur-de-lis,² and in another case in profile, set beside the same symbol,³ appearing in the regular hieroglyphic series. This quasi-religious connexion seems to anticipate the close relationship of the lion to the Minoan Goddess as guardian and supporter, so repeatedly illustrated by glyptic works from the beginning of L. M. I onwards.⁴ On the 'Ring of Nestor' a lion, couchant on a kind of stand and tended by the two little hand-maidens of the Goddess, acts as Warder of the Underworld.⁵



FIG. 472. LION ON FOUR-SIDED CORNELIAN PRISM: ARKHANES.

¹ The date of the Cretan ivory seals on which these 'processional' types appear is much later than Mena's time and overlaps M. M. I a. For examples, see especially Xanthudides, *Vaulted Tombs of Mesará* (Transl. Droop), Pls. VIII, XIII, XIV, XV; also 'Αρχ. Δελτίον, iv, Παράρτημα, p. 21 (Marathokephali).

² On a four-sided bead-seal of green jasper from East Crete. On another side of this four facing heads of a feline animal, perhaps

also a lion, appear in a vertical row.

³ This facing design with the fleur-de-lis originates a series of types on seal-stones of a talismanic or amuletic class (*P. of M.*, i, p. 673, Fig. 492).

⁴ The earliest example of such religious usage seems to be the Zakro sealing showing the lion guardians of a portal (*P. of M.*, i, p. 308, Fig. 227, c).

⁵ A. E., *Ring of Nestor*, &c., p. 65, Fig. 53, and cf. *P. of M.*, iii, pp. 153, 154 and Fig. 104.

Lion types in M. M. II of Mainland inspiration.

Lions divine guardians.

Lions leaping on their Prey: Minoan Versions.

The coursing lion of Fig. 472 may itself be regarded as the forerunner of the scene on the inlaid dagger of Queen Aah-hotep (c. 1550 B.C.) the Minoan workmanship of which is undoubted.¹ On this the lion pursues a bull—also at full gallop—a movement as distinctively Minoan as are the rocks jutting down from the upper border. It is but a step from this scene of pursuit to that so finely conceived in the somewhat later inlaid design on the dagger from the Mycenae Shaft-grave,² where the lion, his feet still on the ground, springs on a dappled deer whose hind legs are also extended in the characteristic *galop volant* of Minoan Art. This motive is, indeed, usual with such subjects, as already shown³ from a fine L. M. I *a* design on a seal impression from Hagia Triada where one wild-goat pursues another over rocky ground.

Lion on Shaft-Grave dagger-blade.

From the mature L. M. I epoch onwards the fully developed scheme of the lion leaping on his quarry and gripping his dorsal or cervical vertebrae as he bears him to the ground is of frequent occurrence on Minoan seal-types. The victim is by turns a bull, a stag, or a large horned sheep. The field is alternately rectangular, oval, or round. The lion's hind-legs grip the victim's hind-quarters, or at times one of them rests momentarily on one of the hind-legs of his quarry. But in this case, too, neither leg touches the ground and the whole weight of the great beast is thrown on his prey.

Fully developed scheme of lion leaping on quarry.

On the great gold signet-ring from Thisbé,⁴ on the other hand, the lion has already made his pounce, and, though one hind-leg is loose, the claws of the other are firmly embedded in the victim's flank. This is the complete adaptation to the case of the lion of the purely Cretan scheme of the dog springing on the back of *agrimì* or stag.

Thisbé signet-ring.

Typical groups of this class must be regarded as the climax of this artistic composition, worked out step by step on Cretan soil.

¹ See *P. of M.*, i, p. 715, Fig. 537.

² Reproduced in *P. of M.*, iii, p. 123, Fig. 72.

³ *Ib.*, i, p. 716, Fig. 539, *d*.

⁴ A. E., *Ring of Nestor*, &c., p. 9, Fig. 9, and cf. p. 540, Fig. 491 below. On a gold bead-seal

of the 'flat cylinder' type (*Ib.*, p. 9, Fig. 8), the lion who grips the bull's cervical vertebrae has his hind feet still on the ground. The same feature is repeated on the fine onyx lentoid from the Vapheio Tomb ('*Ep.* 'Αρχ., 1889, Pl. X, 19).

**Oriental Group of Lion seizing Quarry contrasted with
Minoan: conditioned by Cylinder Types.**

Oriental
group
con-
trasted
with
Minoan.

As already observed, this type of the lion seizing his prey has been held up to us as the very essence of Oriental symbolism. But the archaeological results by this time acquired in Egypt and over a wide Oriental area beyond the Aegean must be taken to show that, while the elements of hunting scenes can be naturally traced back to a remote epoch, the fully developed type of the lion seizing an animal of the chase and bearing it down with his whole weight was first perfected by Minoan craftsmen. It looks, indeed, as if it had been a special achievement of the Cretan seal-engraver's Art in which we see it led up to by simpler scenes in which hunting dogs leap down on the neck or back of wild-goats and bring them to their knees.

Surprising as it may seem, considerable researches into the copious materials supplied by early Oriental Art—mainly from cylinder-seals but now augmented by the picturesque subjects presented by the Sumerian inlays from Ur—in which lions are depicted attacking their quarry, have only been productive of negative results.² Evidence is lacking on that side of this scheme of the lion actually leaping on the back of its quarry.

Influence
of Cyl-
inder types
Sumerian
Versions.

The characteristic cylinder type of Old Chaldaea representing the onslaught of lions on their prey depicts two animals crossing each other, their

hind-legs resting on the ground and with the head of the carnivore turned round and gripping the back of his victim's neck (Fig. 473).³ The more or less upright or, at most, diagonal attitude of the lion, inherent in the cylinder technique, is also seen in the case of the parallel type where



FIG. 473. EARLY CHALDEAN CYLINDER SHOWING LION ATTACKING GAZELLE.



FIG. 474. INLAY OF QUEEN SHURAD'S TOILET BOX: UR.

¹ In these researches I am glad to acknowledge the kind assistance of the representatives of the Egyptian and Assyrian Department of the British Museum.

² Ward, *The Seal Cylinders of Western Asia*, p. 62, Fig. 146 (Univ. Penns. Coll.).

³ See Ward, *Seal Cylinders, &c.*, p. 44, No. 114. The alternative method of attack by gripping the jugular vein recurs in Minoan glyptic Art. It is seen on two gem types in which in the one case a lion, in the other a Griffin, grip the front of a stag's neck from over his head.

the carnivore seizes the throat of his victim to drink his life-blood, as on the inlays of Queen Shubad's toilette box¹ (Fig. 474). The lion, here



FIG. 475. LION ATTACKING BULL:
ON EARLY SUMERIAN CUP.

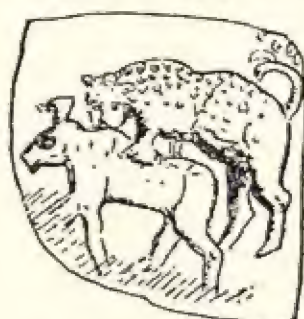


FIG. 476. EXCEPTIONAL
TYPE ON PROTO-ELAMITE
SEAL IMPRESSION.

standing firmly on the ground, grips the throat of an up-rearing stag.

What is remarkable, moreover, is that where, as on the early mace-heads² such as that dedicated

Lion's
hind-legs
on
ground.

to King Musilim of Kish, there was every opportunity, as far as space conditions go, of setting the lion full on the bull, the cylinder type is in the



FIG. 477. LATE ASSYRIAN CYLINDER.

main adhered to. A similar method is adopted in the engraved design on the convex panel of a cup of early Sumerian date (Fig. 475).³ It may, indeed, be said that in the whole series of early Oriental representations of the lion and bull group and kindred motives the sole example of a carnivorous beast leaping on

his prey with the impact of its whole body thrown on to it is to be seen on a proto-Elamite seal impression, unique in type, of about 3000 B.C. (Fig. 476).⁴ But even in this case the leopard-like animal who attacks the bull might be supposed to have his hind feet on a higher ground level. His off hind-foot hardly touches the bull's hind leg.

Exceptional
type on
proto-
Elamite
sealing.

¹ See C. L. Woolley, *Ur Excavations*, Pl. 96, Text, 276.

² Heuzey, *Découvertes en Chaldée*, Pl. I, ter, No. 2, Cat. no. 4. L. W. King, *History of Sumer and Akkad*, p. 99, Fig. 42.

³ Heuzey, *op. cit.*, Pl. XLVI, no. 3 Cat., p. 189; cf. King, *op. cit.*, p. 79, Fig. 30.

⁴ E. Legrain, *Empreintes de cachets élamites*, Pl. XI, Fig. 172, and p. 50 (*Mission Arch de Perse*, Vol. XVI). M. Legrain observes that

On an Assyrian cylinder¹ of much later date, where the lion's body is seen in front of the bull and the whole rendering is freer than the usual cylinder style, we see the bull in the course of being brought down head-



FIG. 478 *a, b*. RED JASPER WEIGHT IN SHAPE OF HARNESSSED LION SEIZING BULL :
TELL-EL-AMARNA.

long, but the lion still rests on the ground (Fig. 477). This cylinder belongs to a time when Minoan influence was already reacting on Assyrian Art.

As a further illustration of the permanent conditions attaching to this Oriental type may be cited an interesting little red jasper relief of a lion and bull from Tell-el-Amarna, at one time erroneously claimed to be of Minoan workmanship (Fig. 478).² The object is hollow below, and its true explanation has only been recently supplied by a parallel relic from Ras Shamra,³ in the form of a stone lion-weight, the lead filling of which was still preserved. In the above case the group of the two animals has been substituted for the traditional type of a single couchant lion. The Oriental class to which the relief belongs must be regarded as clearly ascertained. At first sight, indeed, the lion might perhaps be regarded as throwing his full weight on the bull, but as a matter of fact, the bull is as much above the lion, who grips its neck, as the latter is above the bull, and the whole of the

the spots may be due to rugosities in the bituminous clay of the impression.

¹ Of haematite, in the Ashmolean Collection.

² H. R. Hall, *Oldest Civilization of Greece* (1901), p. 303 seqq. and Figs. 70, 71, by Mr. F. Anderson, from which Figs. 478 *a, b*, are reduced. In his later paper on *A jasper group of a lion and bull fighting, from El 'Amarnah, in the British Museum* (*Journ. of Egypt. Arch.* (XI)), 1925, p. 159 seqq., Dr.

Hall revised his first impressions and suggested a North-Syrian origin for it (p. 161). It may be observed that the Oriental source of the work is at any rate well defined by the character of the lion's whiskers—visible on one side. These go back to an early Sumerian tradition, which, however, survived in Assyrian Art.

³ Professor Schaefer has kindly informed me of this discovery.

lion's body rests on the ground. The lion itself wears a harness and represents a hunting animal from some royal Oriental 'kennel'. The general associations of this object with Tell-el-Amarna would point to an early

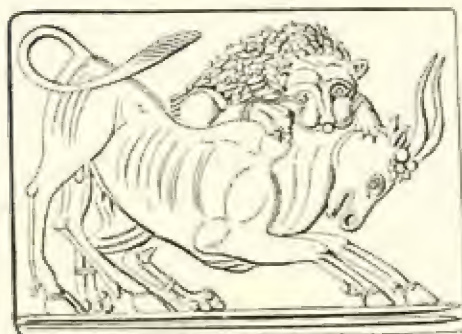


FIG. 479. LION WITH HIND-FEET ON GROUND BEARING DOWN BULL. GOLD BEAD-SEAL: THISBÉ.



FIG. 480. LION WITH HIND-FEET ON GROUND BRINGING DOWN GALLOPING GAZELLE. DAGGER-BLADE: MYCENAE.

Fourteenth-Century date, but the work, both in its strength as well as in certain details, preserves a much earlier, Sumerian tradition.

It is clear that exceptional examples exist among Minoan designs, both in intaglio and small relief, in which the lion makes his onslaught on the quarry with the hind-legs still resting on the ground. This attitude is seen on a gold bead-seal of the 'flat cylinder' type from Thisbê (Fig. 479),¹ as well as on a fine onyx lentoid from the Vapheio Tomb.² It recurs again on the Mycenae dagger-blade (Fig. 480) and in one of the late reliefs on an ivory mirror handle from Enkomi. In such cases the possible reaction of Oriental models cannot be excluded, though there may well have been a parallel indigenous tradition. Where, as on the Thisbê bead (Fig. 479), or, again, on the Mycenae dagger-blade, the whole forepart of the quarry is borne down by the lion's weight, the scheme may still fairly be regarded as at any rate Minoizing. In the true Oriental version the lion's weight acts rather as a counterpoise to that of his victim.

Minoan type with lion's hind-legs on ground.

But there can be no doubt that the more characteristic Minoan form of the group is that in which the lion makes his attack by leaping on it from above, thus throwing his full weight on his victim. And this, as we have seen, has no counterpart in the lands influenced by the cylinder technique.

On the other hand, we have seen that on Cretan soil the part later played by the King of Beasts had already been taken at much earlier date

Examples of traditional Cretan type of lion springing on quarry's back.

¹ See, too, *P. of M.*, iii, p. 124, Fig. 75. This intaglio belongs to the earlier Thisbê group as the 'flat cylinder' form itself indicates hardly later than L. M. 1a.

² *Eph. 'ApX.*, 1889, Pl. X, 18.

by hunting dogs. The original object of their chase had been the native wild-goat, and, later, the fallow deer. Of the latter type, as transferred from dog to lion, a very beautiful example is supplied by a lentoid bead-seal (Fig. 481),¹ included also



FIG. 481. CHALCEDONY LENTOID: LION BEARING DOWN FALLOW DEER: FROM ATHENS. (1)



FIG. 482. LIONESS (ABOVE) AND LION (BELOW) SPRINGING ON HORNED SHEEP: YELLOW AGATE, MYCENAE. (c. 1)

a lion and a lioness grip the neck of a horned sheep.⁴

among the select gems photographed on Suppl. Pl. LV, c. The stone is a chalcedony, clouded red, and the finesse of the execution is such that it has had to be here exceptionally enlarged to three diameters to give an adequate idea of the details. It is necessary to suppose that in this case the finer lines—failing an actual diamond—were engraved by means of a corundum point.

From the palmation, here so characteristically given, the quarry is clearly a fallow deer² borne down by the full weight of a springing lion who seizes it by the hind-quarters. One of the lion's legs rests on the hoof of the deer's fore-foot, the other is free. The agony of the victim is shown by the open mouth and protruding tongue.

A parallel illustration in which the lion grips the neck of a fallow deer, also very finely engraved, is seen in the intaglio of the large gold signet-ring from Thisbê (Fig. 491 below).³ In the same way on the lentoid (Fig. 482)

¹ From a cast kindly supplied me by Dr. R. Zahn, the Director of the Greek Department in Berlin Museum (see Furtwängler, *Beschreibung*, &c., p. 3, No. 15, and cf. *A.G.*, ii, No. 3, Pl. 3).

² See Imhoof-Blumer und Keller, *Tier- und Pflanzenb.*, p. 198 (Pl. 17, 22).

³ P. 540.

⁴ For the horned sheep, see p. 569 sqq. below.



a



b



c



d



e



f



g



h



i



j



k



l

SELECTION OF LATE MINOAN INTAGLIOS (L. M. I b-L. M II) WITH ANIMAL FORMS MOSTLY SYMMETRICALLY ARRANGED.

Much the same scheme recurs on a strongly incised amygdaloid bead-seal of mottled red and white cornelian from Crete,¹ also belonging to a good Late Minoan epoch, here reproduced in Fig. 483, where the

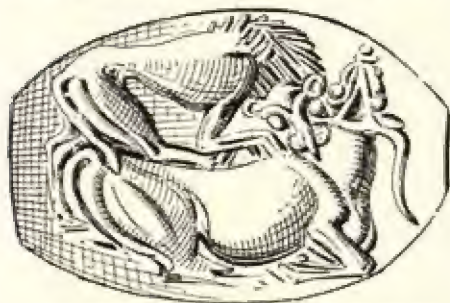


FIG. 483. CORNELIAN BEAD-SEAL, CRETE: LION BEARING DOWN BULL.



FIG. 484. LION SPRINGING ON BULL: IVORY PLAQUE, SPATA.

quarry is a bull. In this case one of the lion's hind-feet grips the bull's back, while the other rests on the bend of its hind-leg.² In another version, the lion, who attacks the back of the bull's head, is himself transfixed with three arrows.

Of the taking over of the seal-types before us on to ivory reliefs, a good example is supplied by the L. M. III plaque from the Spata *tholos* (Fig. 484),³ where the lion makes a flying leap on to the bull's neck from behind. On the ivory mirror handles from Enkomi, the Cyprian Salamis,⁴ on the other hand, though the Minoan source is obvious, the lions' bodies are contorted by the nature of the space, so that their hind paws, as in the parallel type, Fig. 479, above, rest on the ground. These apparently date from Rameses III's time⁵ (c. 1212-1171 B.C.), and represent a

Lion and bull group on Minoan ivories. Enkomi mirror handles

Minoan colonial fabrics on Syrian and Cilician Coasts.

branch of Art of which one centre at least may be found in the Minoan colonial plantation at Ras Shamra on the Syrian Coast, so successfully explored by Professor Schaefer and the French Mission.

¹ In my Collection, from Central Crete.

² Cf., too, the lion on a Phaestos gem, *Mon. Ant.*, xiv, p. 621, Fig. 93.

³ B. Haussoullier, *Cat. des objets découverts à Spata* (*Bull. de Corr. Hell.*, ii, 1878), Pl. XVI, 4, pp. 212, 213.

⁴ *B.M. Excav. in Cyprus*, Pl. II, nos. 402 and 872 B, and see pp. 31, 32. From Tomb 17.

⁵ The relief of a warrior (p. 804, Fig. 782) attacking a Griffin on the other side of mirror handle is duplicated by a fragment showing

a similar relief belonging to an ivory casket. This is not mentioned in the text, but, as has been pointed out by Poulsen (*Jahrbuch d. Arch. Ges.*, 1911; *Zur Zeitbestimmung der Enkomi-funde*, pp. 223-5), it was found in Tomb 2, where it was associated with a scarab of Rameses III (attributed by Murray to the XXII Dynasty). In my paper on the same subject (*Journ. Anthr. Inst.*, xxx (1900), p. 213), I had already compared the breast-plate of the warrior attacking the Griffin with those of the invaders from Western Asia on

Mino-
Cilician
Ceramic
type of
lion and
bull:
L.M. IIIb.

It is becoming clear that parallel Colonial outposts of Minoan culture had also existed on the Cilician Coast, to which, indeed, the Hittite characteristics of the charioteer on the ivory casket from Enkomi infallibly lead us. Preliminary explorations made by Mr. Burton Brown on that side have resulted in the discovery of painted sherds from a mound at Ankhialê, near Tarsus, recording the existence of an independent school of the very latest Minoan date. Among these is the fragment, slightly restored in Fig. 485, showing a lion springing on a bull according to the true Minoan tradition.¹ This type—to which the term 'Mino-Cilician' may be applied—does not happen to be represented in any other branch of Late Minoan Ceramic Art.



FIG. 485. PAINTED SHERD FROM ANKHIALÊ NEAR TARSUS, SHOWING LION SPRINGING ON BULL. M. M. III ('MINO-CILICIAN').

It is a far cry from such rude reminiscences of the old Cretan type as we see here to the masterpieces of the Glyptic Art given above. Elements of transition, however, already appear on such decadent examples as the seal impression (Fig. 486)—belonging, it may be presumed, to the Re-occupation Period—from the Little Palace at Knossos. Here, again, we see a similar scheme of the lion wholly resting on the bull's body.

A seal impression from the 'Archives Hoard' of the Palace that may be clearly dated to the L.M. II Period supplies an interesting variation in which two lions seize on their quarry, one leaping on the bull from in front and the other from behind (Fig. 487). This version has a special interest in its relation to archaic Greek and Phoenician versions of the subject.

Of the influence of such Minoan offshoots on Assyrian Art much remains to be elucidated. Such positive facts as the discovery on the site of Ashur itself of the detached upper part of a 'rhyton' of L. M. I type,

Minoan
influences
on As-
syrian
Art.

Rameses III's Monument at Medinet Habu, and had demonstrated the practical identity of the chariot on the Enkomi draught-box with the Hittite chariots of Rameses II's

fresco depicting the battle of Kadesh.

¹ The photograph from which Fig. 485 was drawn is due to the courtesy of Mr. Burton Brown.

formed of faïence of the Cypro-Minoan class,¹ and a vessel in the shape of a woman's head,² of the same fabric—probably even by the same hand—as similar vessels from Enkomi, will be found to have a much wider context.

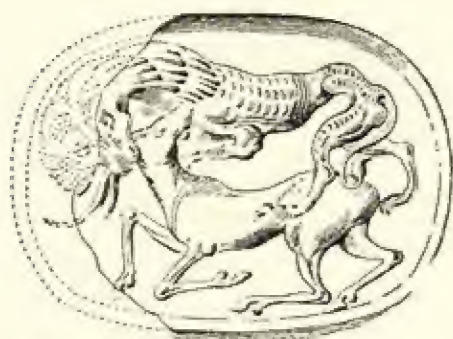


FIG. 486. DECADENT TYPE OF LION BEARING DOWN BULL ON SEAL IMPRESSION; LITTLE PALACE, KNOSSOS.



FIG. 487. TWO LIONS ATTACKING BULL; SEAL IMPRESSION, ARCHIVES DEPOSIT, KNOSSOS.

That the lion and bull type was taken over by the Phoenicians in a religious connexion is clear by its later emergence on the coins of Byblos (Geba),³ whose Adonis cult, coupled with the local Astartê, bears a certain relationship to that of the Minoan world.⁴ A supplement to this is supplied by the much earlier example of this scheme, here for the first time reproduced, on a crystal scarab from Beirût (Fig. 488).⁵ The prey in this case is a cow, suckling a calf. The lion seizes the cow from behind, throwing on her his full weight, and with one leg resting on her hindmost hoof. The other

Minoan lions and bull type on crystal scarab from Beirût.

¹ Andrae, *Die archaische Ishtar-Tempel in Assur* (S. 20176); Hall, *J.H.S.*, xlviii (1928), p. 71, Fig. 5. It very closely approaches a detachable form of 'rhyton' top that appears in marble-like stone at Knossos in L. M. I b (c. 1500-1450 B.C.). See *P. of M.*, ii, p. 224, Fig. 129, 17. This is a remarkably early starting-point for the Cypro-Minoan faïence series to which the Ashur specimen unquestionably belongs.

² Andrae, *Farbige Keramik aus Assur*, (1923), p. 1 seqq. and cf. Hall, *The Civilization of Greece in the Bronze Age* (1927), pp. 225-7, Figs. 299, 300, and, for the close connexion of this Ashur faïence with Cyprus,

J.H.S., xlviii (1928), p. 64 seqq.: *Minoan Faïence in Mesopotamia*. The woman's head was found in the Temple of Ishtar of the time of Tukulti-Enurta I (c. 1260-1238 B.C.).

³ Babelon, *Cat. de la Bibliothèque Nationale: Perses Achéménides*, Pl. XXVI, 12 &c. (*Coins of King Elpaal*, c. 360 B.C.), his successors. Cf., too, *B.M. Cat. Phoenicia*, Pl. XLI (Supplementary).

⁴ See *P. of M.*, iii, pp. 473, 474 and my 'Frazier Lecture', 1931: *The Earlier Religion of Greece*, pp. 41, 42.

⁵ In my Collection since 1894, hitherto unpublished.

(incomplete) is in the air. The whole is vigorously engraved in a somewhat rough style, and the epithet 'sub-Minoan' may be fittingly applied to it.¹

Cypriot
Greek,
Ionian
and
Phoeni-
cian
types.

It looks, moreover, as if the type was taken over into the Classical Greek repertory from Cypriote or Phoenician sources of somewhat later date. On a chalcedony scaraboid of early Fifth-Century date² the design of a lion seizing a bull is associated with the Oriental winged disk. In other cases derivations of the lotus flower appear beside it.³ Specially interesting is an intaglio depicting this motive on a very fine Ionian scarab, a beautiful sard, from a tomb of the Greek cemetery of Gela⁴ (see below, Fig. 493). So archaic here is the design, recalling the early bulls of Sybaris, that it can hardly date later than the close of the Sixth Century B.C. It is interesting to recall that Gela itself had been founded by settlers from Crete or Rhodes in 589 B.C., and its Eastern relations may well have continued into the succeeding epoch.



FIG. 488. ROCK CRYSTAL SCARAB,
FROM BEIRÛT.

Lion and
bull as
coin
type.

It was natural that this scheme should occur on early Cilician dies at Tarsus and, associated with a stag, at Malla, whose name contains a record of its old Cretan connexion, preserved in that district to the very latest Minoan Age—witness the Ankhialê sherd (Fig. 485, above). The powerful rendering of the design on the early tetradrachms of Akanthos⁵ (Fig. 494)—not far distant in date from that on the Ionian scarab (Fig. 493)—recalls the fact, recorded by Herodotus,⁶ that the neighbourhood was still infested by lions at the time of Xerxes' invasion. In the case of this Chalkidic city

¹ The 'sub-Minoan' ('sub-Mycenaean') character of a good deal of Phoenician Art was long since recognized by Monsieur Salomon Reinach.

² Furtwängler, *A. G.*, Pl. VI (from *Thebes*): Warren Coll.

³ E.g., *B.M. Cat. Engraved Gems*, jasper scarab (two lions); scarab, Vienna Coll., Furtw., *A. G.*, vii, 25 (degenerate lotus bud).

⁴ Acquired by me in 1890 (with vases and other relics) from the cemetery of Costa della Zampogna at Terranova, behind the original Gelôan acropolis of Lindoi.

⁵ *B.M. Coin Catalogue: Macedonia, &c.*,

p. 30, Akanthos No. 1 and Fig. 493. Cf. Head, *Hist. Num.*, 2nd ed., p. 205, Fig. 121. On the lion and bull group of Akanthos, see P. Gardner, *Types of Greek Coins*, Pls. III, 13 and VII, 20; and p. 135 (where he compares the gateway sculpture); G. Macdonald, *Coin Types*, p. 80. He regarded the type as ultimately of Mycenaean (Minoan) origin, and refers to remarks of mine on the actual revival—*per saltum*—of Minoan lentoid designs on coins. In this case, however, there seems to have been a direct tradition.

⁶ vii. 125 seqq.

we have an example of the taking over into sculpture of a type originally confined to small glyptic objects like seals and coin-dies, for the subject was repeated as the City arms in a relief¹—a good deal later in date than the archaic coin-type—that had been set up above one of the gates of Akanthos.²

The attack of lions on bulls is a commonplace of the Homeric poems, but the description does not go much beyond generalities.³ Where, as in the account of the Shield of Achilles, the description applies to an actual work of Art, we find two lions attacking the bull. This scene corresponds with an alternative Minoan form of the present scheme illustrated above in Fig. 487.⁴ Amongst the high reliefs in *poros* stone brought to light on the Athens Akropolis, in addition to an example dating from about 600 B.C. of the version showing two animals,⁵ there remains in a somewhat more advanced style, in which two lions take part.⁶ This work is the very embodiment of primeval force. When fresh from the earth and with the colours still unfaded—as it was my good fortune to see it—it set forth in a quite unique manner the most vivid polychrome traditions of early Greek sculpture. The lions have scarlet manes, their bodies being of a paler red, their eyes—as here portrayed between vermilion-rimmed lids—are black, with white pupils. The bull's body is a deep blue (in places turned to green) and from the holes torn in its hide by the lion's claws its life-blood pours in crimson streams down its flanks.⁷

Early
painted
reliefs of
Akro-
polis,
Athens.

In a very different technique—the colours less crude and the modelling unsurpassed by any later Age—the bull relief that adorned the North Portico at Knossos inevitably suggest themselves for comparison. Certain details, indeed, such as the bright red rims of the eyelids and the white pupils⁸ against a dark ground, might be taken to imply a real coloristic tradition.

¹ Clarac, *Musée de Sculpture*, Pl. II, p. 223, no. 722; S. Reinach, *Répertoire de la Statuaire grecque et romaine*, i, p. 112.

² A record of the source of the relief is preserved in the archives of the Louvre (*Sitzungsberichte d. Münchener Akad.*, 1877, p. 17).

³ E.g. *Ib.*, xvi, p. 487, 488. In *ib.*, xvii, p. 61 seqq., however, the lion is described as seizing the bull's neck in his mighty teeth and gorging on its blood and entrails.

⁴ See above, p. 535.

⁵ R. Heberdey, *Altattische Porosskulptur* (1919), p. 78, Fig. 64 and see Dr. Heberdey's reconstitution, p. 79, Fig. 65. On these early sculptures in *poros* stone, see, too, E. Buschor,

Burglöwen, (*Ath. Mitth.*, 1922 (xlvii)), p. 92 seqq.

⁶ Heberdey, *op. cit.*, pp. 88, 89, Figs. 67, 68.

⁷ Letter of A. E. to *Manchester Guardian* on recent discoveries on the Akropolis at Athens, July 17, 1884. The remains of the bull's horns, as pointed out by Wolters, are of a pale green, which also distinguishes his hoofs and fetlocks. The bull's body is almost executed in the round. Heberdey, *op. cit.*, restores the group as a pedimental composition with two symmetrically grouped lions fastening on the elongated bull, here prone. The Geneva krater (Giraudon II, Pl. XIII, 2) supplies a good black-figure parallel.

⁸ See *P. of M.*, iii, p. 174, Fig. 118.

Traces of
painted
stucco re-
lief of
lion
group at
Knossos.

Is it possible that monumental reliefs of the lion and bull group in painted plaster had found their place on the Walls of Knossos? It is shown below (p. 547) that the 'double gradation'¹ seen beneath the seated lion type of the lentoid gem, illustrated in Fig. 509 points that way.

More than this, a fragment of stucco relief (Fig. 489) representing—life size—part of the mane of a lion with clear traces of red colouring, together with a small piece of the lion's leg, were actually found in the artificial vault beneath the North-East angle of the building.²

A remarkable feature of the larger fragment is the appearance above the curving outline of the lion's mane of a small section of what is clearly another animal with shaggy hair, which cannot certainly be identified with a bull.³ Neither does it correspond with the lioness such as we see grouped with her mate in some glyptic types. It would quite agree, however, with the shaggy fore-quarters of an *agrimì*, whose neck had been gripped by the lion's jaws as he bounded forward. In any case the remains may be held to assure the existence of the general type of the lion seizing his quarry among the great painted plaster reliefs on the Palace walls. It is further to be noted that the conventional red colouring of the lion's mane corresponds with that of the archaic *poros* group of the Akropolis.

On the Cretan side, the group of the lion seizing its quarry begins, as we have seen, on seal-stones and signets, though it is later the theme of



FIG. 489. FRAGMENT OF STUCCO RELIEF OF LION'S HEAD AND MANE AND PART OF ANOTHER ANIMAL; WITH TRACES OF RED PAINT. S.E. PALACE ANGLE, KNOSSOS.

¹ See *P. of M.*, i, p. 686 seqq.

² *P. of M.*, ii, Pt. I, p. 333, Fig. 188, a, b. A perforation was visible in the plaster for a square wooden pin to attach it to the wall, identical with those of M. M. III fresco fragments from the 'Corridor of the Procession' in its earlier shape (*P. of M.*, ii, Pt. II, p. 680 seqq.).

³ The identification with a bull is accepted, indeed, by Dr. Sp. Marinatos (*Arch. Anz.*, 1918, p. 107 seqq.) who would even go farther and bring these fragments from the S.E. pit into connexion with the bull-grappling reliefs of the Northern Entrance portico. These however have nothing to do with lions.

small ivory reliefs. No representation of this group in works of the true Geometrical class has as yet come to light, and its first vogue in Hellas can be reasonably brought into connexion with its survival in Cypriote Art, on which the masterpieces of the Assyrian Empire were now reacting, while, later, its propagation West may have been largely due to scarabs of the 'Ionian' class. To Ionian influences, too, was doubtless due the appearance of variants of this design where the lion seizes a bull by the neck, as on a tomb at Xanthos,¹ and it is noteworthy that the Assyrian influence in that School of Art is attested in the lion relief of another Xanthian tomb² by the characteristic whiskers, of remote Sumerian descent. It also survived on parallel Phoenician works, and the version showing two lions occurs on the centre of a silver bowl from the Regulini Galassi Tomb.³ We see it already in a design, helplessly enough drawn, of a lion seizing a dappled deer from behind, on the neck-band of an early Attic amphora⁴ of early Seventh Century date.

The lion and bull types of early Greek Art were connected thus by a real *catena* with the Minoan prototypes, but there remains a great probability that there had been, in certain cases, an actual resuscitation of the design through the copying of Minoan seal-types, of which we have undoubted evidence.⁵



FIG. 490. LION AND BULL ON THARROS SCARAB.

Some of the Hellenic reproductions of that version of the group in which the lion leaps on a stag, of which Minoan examples have been given, may be thought specially suggestive in this connexion. The exquisite scarab-type (Fig. 490)⁶—though found at Tharros, certainly by a Greek hand—in which we see the scheme adapted to an oval field, here with a cable border, and the fine later rendering on a didrachm of the old Phocaeian Colony of Velia (Fig. 492), curiously recall certain Minoan seal-types.

Later
Greek
versions.

For the lion and bull class the designs on the Akanthos stater (Fig. 494) and the Gela scarab (Fig. 493)—already referred to—are equally significant. These suggestive parallels are here placed side by side with the intaglio on the large gold signet-ring from Thisbê (Fig. 491), where the spots of the fallow deer are also reproduced.

¹ *Ib.*, p. 393, Fig. 278 (B.M.).

² *Ib.*, p. 391, Fig. 276.

³ *P. et C.*, iii, p. 769, Fig. 544, &c.

⁴ G. M. A. Richter, *A New Early Attic*

Vase; *J.H.S.*, xxii (1912), p. 370 seqq., and Pl. XI (Metropolitan Mus., N.Y.).

⁵ See *P. of M.*, iii, pp. 125, 126, Figs. 79, 80.

⁶ C. W. King, *Antique Gems and Rings*, i. 124.

Over a thousand years here separate the execution of the Greek and the Minoan designs. But the type itself is essentially that which had spontaneously developed on the soil of Minoan Crete at a still more remote epoch.



FIG. 491. LION SEIZING STAG ON THISBÉ GOLD SIGNET ($\frac{3}{4}$). c. 1500 B.C.



FIG. 491 bis. AMYGDALOID BEAD SEAL (DARK SARD), CRETE, 1934, SANGIORGI COLL.



FIG. 492. DIDRACHM OF VELIA (IVTH CENT., B.C.). ($\frac{3}{4}$)



FIG. 493. SARD SCARAB, GELA (TERRANOVA), SICILY.



FIG. 494. SILVER STATEROF AKANTHOS, VIIth CENT., B.C. ($\frac{3}{4}$)

§ 106 B. INDIGENOUS SPHRAGISTIC TRADITION (*continued*)—WOUNDED QUARRY TYPES.

Wounded quarry types—talismanic value to hunters; Artistic designs succeed the merely magical; Stricken calf trying to extract arrow; Similar types of wounded lion; Scheme as applied to hounds; Wounded lion, seated; Wounded lion on Shaft Grave bead-seal; Comparison with Assyrian reliefs and tradition in Greek Art.

Type of the Wounded Quarry, and its Talismanic Virtue to Hunter.

MUCH evidence has already been adduced to show that from an early date certain types of bead-seals, or 'periapts', were adapted as talismans for securing beneficial results to their owners, just as white 'milk-stones' are worn to-day by Cretan wives. Types of such magical import may be clearly traced to the more primitive class of Cretan bead-seals, dating well back into the Early Minoan Age. It has been shown, however, that this usage had a special vogue in the last Middle Minoan Period and the succeeding L. M. Ia.¹ Thus we may assume that on such beads strength was secured by the lion's mask²—of which large numbers were roughly and hastily cut for a popular demand. The flying bird—perhaps an eagle—may have brought with it swiftness. The fish and squids on other beads no doubt brought luck to fishermen. The jugs and spouted ewers for pouring liquid offerings appear later, as we have seen, in the hands of the Minoan Genii as promoters of vegetation. The Double Axe as a solitary type on these stones speaks for itself as an emblem of divine guardianship.

Wounded quarry types: Talisman value.

In the same way, the rude figure of a running *agrimì* or wild-goat with a shaft in his side, which is found repeated in a similar way, may well have brought good sport to the huntsman. On a three-sided cornelian bead from Central Crete this design on one face is followed by the equally efficacious flying bird on another (Fig. 495, *b, c*).³ The typical flying bird (also adopted as a sign in the linear script) is better shown on a heart-shaped bead of amethyst from Knossos⁴ (Fig. 497), where it appears to represent a flying eagle.

¹ See *P. of M.*, i, pp. 672, 673. The chronological evidence in such 'talismanic' types afforded by the Sphoungaras Cemetery, explored by Miss Edith Hall (*Excav. in Eastern Crete*), is specially valuable.

² *Ib.*, p. 673, Fig. 492, *a-c*.

³ The side of this bead-seal is simply bossed, without intaglio.

⁴ Obtained by me from the site in 1894. A plain heart-shaped bead of gold—a recurring

Artistic
designs
succeed
the
merely
magical.

But this well-defined and summarily engraved M. M. III—L. M. I *a* class of engraved talismanic beads was from the first accompanied by more select intaglios, on which, though a magical object may also have been



FIG. 495. THREE-SIDED CORNELIAN BEAD-SEAL OF M. M. III CLASS: FROM CENTRAL CRETE

served, the chief aim was artistic effect. An M. M. II—III lentoid of the early flat-sided type,¹ Fig. 496, already gives a pictorial view of a wild-goat struck by a javelin as he flees over the rocks. The libation vessels so



FIG. 496. 'FLAT-SIDED LENTOID: BURNT AGATE, MM. II—III.

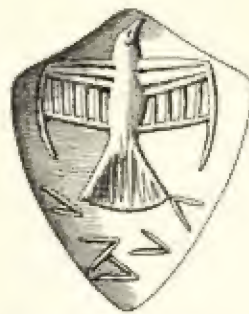


FIG. 497. AMULETIC BEAD OF AMETHYST WITH LATERAL PERFORATION SHOWING FLYING EAGLE.

often set forth by themselves on the talismanic series pass into the hands of Minoan Genii, as adapted to completely ritual scenes. The 'flying bird' charm also takes a fuller and more artistic form on a Hagia Triada seal impression.² The fish talisman is incorporated in the fuller design of the form—occurred in the 'Drain-Shaft Deposit' of M. M. III *b* date (*P. of M.*, iii, p. 411, Fig. 273). The linear marks on Fig. 497 do not seem to be signs of script (as I had at first supposed). The flying eagle later became the type of the coins of Lyktos.

¹ *B.M. Cat.*, Pl. II, no. 87, described (p. 11) as a 'burnt agate'. The exaggerated prolongation of the horns seems to place this among early specimens of this type of seal-stone.

² See p. 490, Fig. 424 above.

fisherman holding up his catch,¹ or, as seen in the fine gem depicting the *Scarus Cretensis*, a kind of 'parrot wrass', for which the Cretan waters were celebrated,² becomes itself a masterpiece of perspective drawing. (See Suppl. Pl. LIV, c.)

Stricken Calf endeavouring to extract Arrow with his Leg.

A particular refinement marks the artistic transformation of the simple early versions of the wounded wild-goat. The theme is transferred to other animals, which are depicted striving to extract the lethal shaft.

Stricken calf trying to extract arrow.

A pathetic and really painful example of this class is supplied by a lentoid bead-seal of milk-white chalcedony from the Knossos district (Fig. 498).³



FIG. 498. CALF ENDEAVOURING TO EXTRACT ARROW: MILK-WHITE CHALCEDONY, KNOSSOS DISTRICT.



FIG. 499. CALF WITH ARROW IN BACK: MOTTLED CORNELIAN, MYCENAE.

Here a calf, with horns just sprouting, singled out, we may suppose, from the herd of wild cattle, for its tender flesh, is depicted as vainly striving to extract an arrow deeply embedded in the lower part of his flank. Bellowing with pain, with protruding tongue and ears erect, he is shown in frantic action half-way to a headlong fall.

As an illustration of instantaneous draughtmanship this intaglio must be regarded as a real masterpiece. The firm, sure touch that is here displayed, and the reserved treatment, which shuns all details except those actually needed for the presentment of this tragedy of the chase as affecting the

¹ *P. of M.*, i, p. 677, Fig. 497; and for a parallel type, *B.M. Cat. Engraved Gems*, 2^d ed., Pl. I, 39.

² *P. of M.*, i, Fig. 498.

³ Fig. 498 is from a drawing by M. E. Gilliéron, fils. This and the gems, Figs. 426,

427, 453, were placed by me at the disposal of Mr. E. J. Forsdyke for his Hertz Lecture on *Minoan Art* given to the British Academy, *Proceedings*, vol. xv (1929). See Pl. X, and cf. pp. 24, 25.

young animal itself, mark this gem as belonging to the great Age. It would hardly be safe to bring down the work beyond the very earliest Late Minoan phase. In its free style it shows some affinity with the galloping steer on a Vapheio lentoid (L. M. I b).¹ We already see a fine adaptation of the design to a circular field. This, however, is still sufficiently removed from the more elaborate packing of the space so characteristic of many seal-types of the last Palace epoch (L. M. II) and later, belonging to the true 'lentoid' style.

That this or slightly variant types of the same design had a certain vogue in the Minoan World is shown by its recurrence on a mottled cornelian lentoid from Mycenae (Fig. 499),² though in this instance the arrow penetrates from above, entirely out of reach of the calf's leg.

In this, as in the familiar lion and bull group dealt with above, the specialized artistic versions of the wounded animal fit on to an indigenous class of which the subject was the native *agrimn*, serving the purpose of 'sympathetic magic' for the Cretan hunter. In its specialized artistic form, where the stricken animal tries to withdraw the arrow from its flank, we see the subject applied to the youngling of a herd of wild cattle, such as seem early to have existed in the Cretan lowlands.

Similar Scheme transferred to Wounded Lion.

In this case, too, we see an artistic scheme that had been first applied to an indigenous quarry transferred to the lion, from the First Late Minoan epoch onwards, which had been rendered familiar by the Minoan extension on the Mainland side.

A pictorial type parallel to that of Fig. 498 appears on a sardonix lentoid (Fig. 500)³ from the Vapheio Tomb, in which a lion replaces the calf (L. M. I b). Here conventional rocks are introduced beneath the lion's fore-quarters. A fragmentary clay impression of a lentoid gem, presenting a similar design of a wounded lion among rocks, occurred at Knossos in the 'Jewel Fresco' area, under stratigraphic conditions pointing to about the same date. The same wounded lion scheme is seen on a L. M. Ia seal impression from Hagia Triada (Fig. 502);⁴ in Fig. 501 he seeks to extract

¹ 'Eph. 'ApX., 1889, Pl. X, 14.

² B.M. Cat. Engraved Gems, &c. (H. B. Walters), Pl. II, 6^b, and p. 9. The head, too, is thrown farther back. As on the example, Fig. 498, the mouth is open, with protruding tongue. There is a greater bending of the off hind-leg, but the description of the animal as

'recumbent' is erroneous. It is called a 'bull', *loc. cit.*, but, like the other, is in fact a calf with sprouting horns.

³ 'Eph. 'ApX., 1889, Pl. X, 8. Furtw., A.G., III, 35.

⁴ Levi, *Cretule di Hagia Triada*, &c., p. 33, Fig. 69.



FIG. 500. LION ENDEAVOURING TO EXTRACT ARROW: SARDONYX, VAPHIO.



FIG. 501. LION TRYING TO WITHDRAW ARROW FROM JAW. (2)



FIG. 502. SIMILAR SUBJECT: CLAY SEAL IMPRESSION, H. TRIADA.



FIG. 503 *a*. SIMILAR SUBJECT: WOUNDED LIONESS: CLAY SEAL IMPRESSION, H. TRIADA.



FIG. 503 *b*. WOUNDED LION WITHOUT ARROW, MYCENAE.



FIG. 504. DOG SCRATCHING SIDE. SEAL IMPRESSION, H. TRIADA.



FIG. 505. BITCH SCRATCHING JAW: JASPER LENTOID, CENTRAL CRETE.



FIG. 506. DOG SCRATCHING JAW: SEAL IMPRESSION, H. TRIADA.

the lethal shaft from his jaw.¹ On some sealings of the same series the subject seems to be a lioness (Fig. 503 *a*).² On the fine Mycenae lentoid, Fig. 503 *b*, the attitude of the wounded lion is preserved but the arrow is not shown.³

Other designs show similar attitudes taken over without rhyme or reason to a collared hound, no trace in these cases appearing of any dart

Similar schemes as applied to hounds.

¹ Cabinet des Médailles, Paris.

² Levi, *op cit.*, p. 32, Fig. 68.

³ A. J. B. Wace, *Chamber Tombs at My-*

cenae (*Archaeologia*, lxxxii (1932)), Pl. XXVII, 33, and p. 199.

or arrow. The scheme of the wounded animal is here simply used as a suggestion for a study of a dog scratching himself (Fig. 504). On a red jasper lentoid from Central Crete (Fig. 505),¹ a bitch's leg is raised to the lower part of her jaw, while on another clay sealing from Hagia Triada,² is shown an almost exactly similar attitude in the case of a dog (Fig. 506).³

The strained action of these poses had an obvious attraction for the Minoan artist. The Minoan public loved sensational scenes.

Wounded Lion on Shaft Grave Bead-seal.

Wounded
lion on
Shaft
Grave
bead-
seal.

In the above cases, illustrated by Figs. 500–503 *b*, the wounded animal endeavours to extract the shaft with his hind-leg. Another version, compatible with a less contorted scheme, is that in which a lion, stricken with an arrow in the shoulder, strains his neck round to seize the end of the shaft in his teeth. A noble representation of this occurs on the gold flat cylinder bead-seal from the Third Shaft Grave at Mycenae. He is descending a rocky steep, and his knees giving under the paralysing influence of the wound (Fig. 507).⁴

On the signet (Fig. 507 *bis*)⁵ two arrows wing their way towards the neck and shoulders of a lioness galloping in full flight through a rocky glen, with her cub beside her. On a lentoid bead-seal the arrow sticks in the back of a coursing bull, but his head is simply turned round towards the spectator.

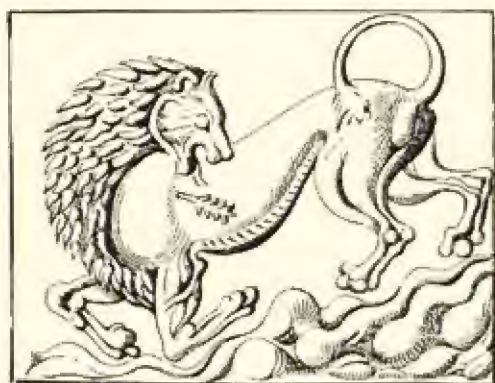


FIG. 507. WOUNDED LION ENDEAVOURING TO EXTRACT ARROW FROM SHOULDER: GOLD BEAD-SEAL (FLAT CYLINDER), MYCENAE. (2.)



FIG. 507 *bis*. LIONESS WITH CUB IN FULL FLIGHT, SHOT AT BY ARROWS.

¹ Levi, *Op. cit.*, p. 97, Fig. 176.

² A. E. Coll.

³ *Op. cit.*, p. 44, Fig. 100.

⁴ From a drawing by E. Gilliéron, fils.

Cl. Schliemann, *Mycenae*, p. 174, no. 125. Furtwängler, *A.G.*, Pl. III, 49; Karo, *Schachtgräber von Mycenae*, Pl. XXIV, 34; Text, i, p. 49.

⁵ From a cast in my possession.

Wounded Lion Seated.

The wounded lion scheme above described is also adapted on lentoid

Wounded
lion
seated.

bead-seals to the figure of the animal sitting up and looking back, as if he had been suddenly stricken when at rest. On a stone of this class observed by me, found near Rethymnos,¹ the lion turns his head back as if about to seize in his teeth the plumed end of a shaft, visible at the back of his neck.



FIG. 508. HUNTSMAN SPEARING SEATED LION (HAEMATITE).



FIG. 509. SEATED LION: ONYX, VAPHEIO TOMB.

The actual attack on a lion, thus seated, by a huntsman who thrusts his spear into its back, is depicted on the haematite 'amygdaloid', Fig. 508.

In relation to this, moreover, it is of interest to observe that the motive has evidently been carried over into the attitude of a lion on the fine onyx lentoid from the Vapheio Tomb (Fig. 509).² In this case a double gradation, that points, as already noted,³ to an architectonic model, is seen below. Such subjects, in which the resulting pose is preserved, though its cause is no longer recorded, are not infrequent in Minoan animal representations on seals.

Comparison with Assyrian Representations of Wounded Lions.

In comparing, as it is impossible not to do, these Minoan glyptic episodes of wounded lions with their admirable and naturalistically studied counterparts from the walls of the Palace of Nimrūd—dating some six centuries later—this Minoan episode of the vain endeavour to extract the lethal shaft is found to be at any rate of very rare occurrence.⁴ Following a long Oriental tradition, these mighty victims of royal huntsmen are seen stricken

Compari-
son with
Assyrian
reliefs.

¹ A variant of this design occurred on a p. 124, Fig. 76.

haematite lentoid from Crete, formerly in the Mitsotakis Collection at Candia, and another (seen by me) on a cornelian lentoid from Sparta.

² *P. of M.*, i, p. 685 seqq.

⁴ There is, as far as I am aware, only a single example of such action among the numerous lion reliefs of Nineveh.

³ *Eφ. 'Αρχ.*, Pl. X, 3. Cpx. *P. of M.*, iii,

with arrows, nor, indeed, has the paralysing effect of the perforation of the dorsal vertebra ever been more powerfully brought before the eye than in the grimly pathetic portrayal of the dying lioness. But neither in that, nor in the fellow relief of the lion pierced through his shoulder to the heart, and with his life blood pouring from his open mouth, (Fig. 510) is there any attempt of the great beast to pull out the shaft. This realistic gesture, with its accompanying bodily distortions, though it suited the sensational spirit of the Minoan artist, in reality detracts from the dignity of the scene.



FIG. 510. WOUNDED LION RELIEF: NIMRŪD: PALACE OF KUYUNZIK.

This must not be taken to call in question the conclusion that much of the naturalistic inspiration of the great palatial style of the Assyrian kings was due to Late Minoan influence. In Hellenic hands, at a later date, the same theme as that illustrated by the lion relief from the Palace of Kuyunzik (Fig. 510) is still further simplified—in accordance with less sensational methods—by the elimination of the lethal shaft itself. The influence of an Assyrian model of the kind on the intaglio (Fig. 511)¹ can hardly be doubted. The lion's whole pose, leaning forward on his fore-legs, with head lowered and open jaws, is practically identical, though there is neither arrow in his shoulder nor blood pouring from his mouth, and the idea of the extreme agony is still conveyed. The work itself—of a style succeeding that of the later Italian scarabs—in its strength and simplicity is still by a Greek hand, but the winged disk above brings the subject into an Oriental relation.²



FIG. 511. WOUNDED LION, BENEATH WINGED DISK, ON ONYX SARDONYX INTAGLIO OF CLASSICAL GREEK STYLE.

Tradition
in later
Greek
Art.

¹ A.E. Collection, formerly Greville.

² This symbol is of frequent occurrence in

the same position on scarabs of the Tharros series. It is also found over the design of

Crete, the Source of the Mainland Seal-types : Their Wholesale Introduction.

The history of the wounded lion type repeats that of the lion seizing a bull. Both, though ultimately supplying a design for Greek artists, and not without their reaction on the East Mediterranean shores, go back to Minoan masterpieces evolved step by step from humbler origins on the primitive soil of Crete. Both, moreover, found their source in more primitive versions in which indigenous animals such as, in the hunting scenes, the native greyhound and, for quarries, the Cretan wild-goat, the fallow deer or the youngling of the herd of wild cattle played their part long before their place was taken by the exotic lion.

Wounded lion motive adapted from earliest Cretan version.

It was only at this later stage, indeed, when the scheme had been fully evolved and adapted, that it makes its appearance in Mainland Greece.

This latter phenomenon is itself only in keeping with the negative result deducible from the whole mass of seal-stones and signets brought to light in that area. Although such objects being of durable materials and of a class suitable for heirlooms might in certain cases considerably antedate the more recent relics in the deposits where they were found, the outstanding evidences of this are very rare. With hardly any exception the most ancient specimens of such intaglios of Mainland provenance are not earlier than the beginning of the First Late Minoan Period.¹ Like the gold 'flat-cylinder' seal from the Third Mycenae Shaft Grave, Fig. 507 above, they illustrate in fact the fully developed Minoan glyptic style. No examples, indeed, exist from this area of that most perfect phase of the Art which ranges from forms of purely natural inspiration to the fancy free creations of the Zakro sealings.

Absence of naturalistic M. M. II-III motives on Mainland.

In other words, as in all other branches of Art, the whole previous history of the seal-engravers' craft as known in Mycenaean Greece, must be sought in its original Island home. An antecedent stage for it on the Mainland side is entirely wanting, the whole craft itself being represented by

a banded agate ring-stone, formerly in the de Montigny Collection (*Coll. de Montigny*, Pl. II, 162), which shows the same somewhat oblong outline. Furtwängler (*A.G.*, Pl. XV, 58, and Text, p. 72) has compared the work of this with that of the gems shown on his Plates XXI, XXII 'Italian ring-stones in the severe style fitting on to that of the Etruscan scarabs'. In Pl. LXVI, 2 and Vol. ii, p. 305 he has illustrated and described my specimen.

That it was made for a Carthaginian is highly probable, and the question arises whether the survival of the type itself is not to be sought on that side.

¹ One or two survivals or offshoots of a three-sided M. M. III type of bead-seals exist of later fabric, e.g. Furtwängler, *A. G.*, Pl. iii, 18, 19 (Peloponnese); Tsountas, *Εφ. 'Αρχ.*, 1889, Pl. X, 5, 6 (Vapheio).

Mainland
sphragis-
tic sub-
jects in-
troduced
from
Minoan
Crete.

some quite unrelated specimens of Helladic seals¹ of the rudest fabric and so few in number that they could be covered with the palm of a single hand. The culture reflected in the designs on the intaglios from the Peloponnese or from beyond the Gulf of Corinth is that of which we have the earliest evidence in Minoan Crete—the episodes of the chase, the sports of the bull-ring, the traditional forms of shields, helmets, and weapons, the chariots and horses, the cattle pieces—the same acquired fashion of Nile-bank scenes, waterfowl, and papyrus clumps. The details of religious cult are derived from the same source—the Goddess and her youthful consort, the sacred emblems, such as the Double Axes and Sacred Knots, the same long-robed priests, the Minoan Genii, the guardian lions, the pillar shrines and ‘horns of Consecration’ before the sacred tree and baetylic stone, the rain-bringing ritual and the sacrificial beasts. The costume with only slight modifications remains Minoan, and, where, as on the Thisbé jewels, the gestes of Mainland heroes may seem to receive illustration as in the case of Orestes or Oedipus, the attire is still Minoan.

Behind all this there is nothing but a blank on the soil of Hellas itself. So far as this, in many ways the most prolific source for our knowledge of Mycenaean Greece, is concerned—over and above the abrupt introduction of new civilized usages involved in the use of signets—what we see is a wholesale invasion of the most varied forms of cultural and religious details indigenous to Minoan Crete.

A certain parallel may perhaps be drawn from the introduction for the first time of the use of engraved gems and signets into Gaul that followed Caesar’s conquest. But in Mainland Greece the extent of the similar innovation that followed the Minoan settlements there was carried out to a much greater degree. The high level maintained by the gem engravers’ work in that region as well as the identity of the themes that they illustrated can only be explained by its widespread occupation by a branch of the Minoan race. The earlier engravers had been trained in Cretan Schools.

Indications of a Mainland Minoan School of Signet Designs.

It must at the same time be observed that from quite early in this period of Conquest we see Minoan engravers of the overseas branch illustrating themes that were in a special degree the property of what, at a slightly later date, we may fairly call ‘Mycenaean’ Greece. On the sardonyx lentoid from the Third Shaft Grave at Mycenae, there seems, as already noted,¹ to be a direct reference to Periphêtês falling over his shield, an episode of

¹ E.g. C. W. Blegen, *Zygouries*, Pl. XXI, 4: Early Helladic.

'Achaean' Saga.¹ It may well be suspected that a man of Mycenae could have equally fitted heroic names to the warriors of the scene of combat on the gold signet from the Fourth Grave (Fig. 511 *bis*). On an engraved gold bead of the Thisbê Treasure we seem to have actually a pictorial record of the crowning drama of Agamemnon's house at Mycenae while two others, as has been shown, record the Cadmean myths in which Oedipus figures.²

Later indications of a Mainland (Mycenaean) School.

If we may believe that the lion still existed in Greece itself in Minoan days, as it is recorded to have done on the Macedonian side over a thousand years later, it is obvious that the artists of the Mainland branch were at a great advantage over their Cretan rivals in portraying the King of Beasts in his various aspects. That a Mainland school grew up showing special proficiency in this subject is highly probable. A series of intaglios exist illustrating this theme and still belonging to a fine artistic period, all of which, so far as any record has been preserved, are of Mainland provenance.³ The most distinctive type, however, that of the wounded lion endeavouring to extract the lethal shaft, still fits on to the earlier Cretan tradition.

The existence of a provincial school does not indeed affect the fundamental fact that the general unity of Minoan culture was still maintained in its broad lines. In the same way the script of Class B, with a few modifications due to dialectic differences, continued, as we shall see, in use in the great Minoan centres on both sides of the Gulf to a considerably later date.

¹ *P. of M.* iii, Fig. 80 (facing p. 126).

² See above, p. 513 seqq.

³ At the head of the series are two 'flat cylinders' of gold, Fig. 507 from the Third Shaft Grave at Mycenae and Fig. 479, p. 531 above, from Thisbê, the form of which almost exclusively belongs to the L. M. I a phase of

of Crete. Of lentoids, the fine example, Fig. 481, p. 532 above (Suppl. Pl. LV, c), was from Athens, itself an important Mycenaean site, and two others from the Vapheio Tomb (*P. of M.*, iii, p. 124, Fig. 74 and p. 545, Fig. 500, above).



FIG. 511 *bis*. COMBAT SCENE ON GOLD SIGNET. GRAVE IV, MYCENAE.
(From photograph of original kindly supplied me by Prof. G. Karo.)

Animal suckling young; Wild-goat and kids; Cow and calf—Egyptian version schematic; Religious association of Minoan type—also connected with Syrian Goddess; Influence of Minoan version on Arslan Tash ivories; Assyrian parallels from Nimrud; Minoan outpost at Ras Hamra; Cow and calf on Archaic Greek coin dies; Stag suckling fawn; Maned lion suckling cub; Bull licking hind foot—revival on coin types; Bull scratching head with hoof—parallel motive on coins; Seal impressions from entrance to Royal Tomb, Isopata—bull over architectural frieze with spirals; Late Minoan vogue of true 'Cattle pieces'; Recumbent ox with outline of another—recurrence of stepped base below; Large sealing with Cattle group from N. Entrance Passage—frieze below of sacrificial purport.

Motive of the Animal suckling its Young.

The animal suckling young.

It is clear that in Crete the type of the animal suckling its young goes back to the Middle Minoan Age. A proof of this is afforded by the beautiful faience reliefs of the wild-goat and cow found in the Temple Repositories at Knossos,¹ and there is every reason for supposing that, as in the case of Hathor's cow with its stellar spots, these had a direct relation to the cult of the Minoan Mother Goddess.² Fig. 512 shows a goat suckling its young. The tail, however, is that of a cow.



FIG. 512. GOAT SUCKLING YOUNG: FROM CAST.

Wild-goat and kids on faience plaques.

Of these faience groups, that of the *agrimì* and her two kids, one bleating for its turn—though the rocks below are conventional—presents one of the most natural scenes of animal life to be found in the whole range of Ancient Art.

The Cow and Calf.

Cow and Calf.

The parallel design, on other faience plaques from the same Repositories, of the cow licking the hindquarters of her calf,³ supplies an exquisitely

¹ *P. of M.*, i, p. 510 seqq., Figs. 366, 367, 369.

² *Ib.*, pp. 511-14.

³ *Ib.*, p. 511, Fig. 367, and p. 512, Fig. 369.

realistic prototype for a long series of traditional designs. The motive already appears on a flat cylinder¹ (Fig. 514)—a type which, as already noted, has a comparatively early range. On the lentoid, Fig. 513, the Cow is much better executed than the Calf. Perhaps its best sphragistic illustration—in a duplicated form—is on a chalcedony ring found in the 'Cyclopean House' at Mycenae² (Fig. 515).

As a Minoan signet-type.



FIG. 513. COW LICKING CALF.

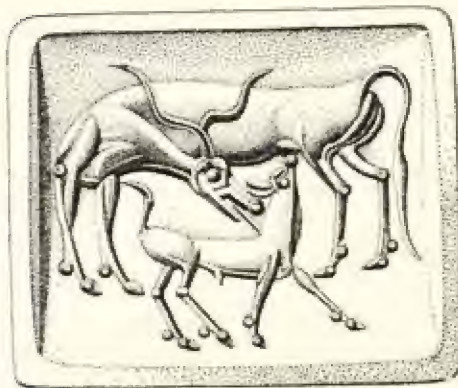


FIG. 514. BANDED CHALCEDONY, CHERSONESOS, CRETE.

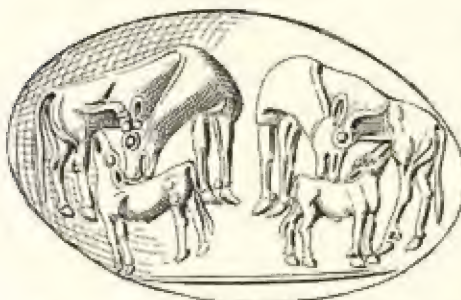


FIG. 515. DUPLICATED DESIGN OF COW SUCKLING CALF ON CHALCEDONY RING, MYCENAE.

From early in the Late Minoan Age this motive is of frequent recurrence among the intaglio types, both in Crete³ and on the Mainland side, and its popularity may be regarded as a symptom of the growing importance of the bucolic industry. It is found on the sealings of the latest Palatial deposits, and an unfinished matrix with this design, described below,⁴ was found in the 'Lapidary's Workshop' at Knossos, of Re-occupation date and continued to be reproduced to the most decadent days of L. M. III. That it has a certain religious or talismanic significance may be gathered from the fact that on a late and hastily engraved specimen,⁵ a version

¹ Found at Chersonesos, East of Candia: once A. E. Coll., later Lewes House Coll. (J. D. Beazley, *Cat.*, 1920, no. 5, p. 2 and Pl. I). The stone is a banded chalcedony.

² Schliemann, *Mycenae*, p. 112, Fig. 175, does not mention its provenance. See too, Furtw., *A. G.*, Pl. III, 10; *P. and C.*, vi, Pl. XV, 15 &c. A lentoid gem with this type, good as far as the cow is concerned, was discovered by the British School excavations in 1922 (Wace). For another from Mycenae, see *Ep. 'Apx.*, 1888, Pl. X, 22.

³ Several Cretan examples have been observed by me.

⁴ See below, p. 595, Fig. 590.

⁵ An agate lentoid in the Berlin Museum (Furtw. *Cat.*, Pl. I, No. 24). Said to have been found in Continental Greece (*Text*, p. 4).

of the 'impaled triangle' symbol is seen in the field, and this recurs on a parallel type of a lion and cub.¹

From its long history the type itself has a special importance.² The traditional scheme of the cow suckling its calf goes back, on Egyptian monuments, to the Old Empire.³ It reappears among the Middle Empire sepulchral reliefs of Beni Hasan, and from the XVIIIth Dynasty onwards supplies a hieroglyphic sign with the sense of 'be joyful'.⁴ The group is engraved with other kine, amidst a papyrus thicket, on a bronze bowl belonging to the close of the reign of Amenhotep III or the first years of Amenhotep IV.

Egyptian
version
schematic.

From beginning to end, however, the Egyptian versions are little more than pictographs, schematically recording a certain phase in a cow's career. The sketch last referred to, though a little more lively, belongs to a time when—as is well illustrated by the gambolling calves of the Tell-el-Amarna wall-paintings and the galloping ox of the earlier dagger-blade—Minoan Art had already begun to react on the land of the Pharaohs.

Religious
association
of
Minoan
type.

Generally speaking, in Egypt, throughout, the Cow and Calf motive had been little more than *genre*—though it is probable that the formal type had reached Crete, as it did the Syrian coastlands, from that source. That, from the Minoan point of view, however, it had also a religious reference might in itself be gathered from the occurrence of the faience reliefs in the Temple Repositories, and, as already shown, there are reasons for supposing that in this respect the Palace cult had a direct relation to that of the Delta Goddess Wazet, a form of Hathor, whose symbol was the papyrus wand.

So, too, already on a Syrian cylinder of an earlier class,⁵ we have this motive—which is not Chaldaean—taken over in conventional Egyptian shape as a religious adjunct. It appears as an inset, behind a figure of

¹ See below, p. 559, Fig. 522 b.

² Illustrative materials regarding the Cow and Calf motive, to which I am indebted, have been collected by Longperier, *Œuvres*, i. 166; F. Poulsen, *Der Orient und die früh-griechische Kunst*, 21, 29, 55; C. Watzinger *Antike Plastik, W. Amelung, zum 60. Geburtstag*, p. 264 and note 2; and Thureau-Dangin in *Arslan Tash*, pp. 124-6.

³ It appears in the Vth Dynasty Tombs of Anta (Petrie, *Deshasheh*, Pl. V, third register), and of Ptahhetep (Davis, *Mastaba of Ptahhetep and Akhetetep II*, Pl. XVII, second register). It is also found in the Middle Empire Tombs

of Beni Hasan (P. E. Newberry, *Beni Hasan II*, Pl. VII, second register). In the latter example, to be more fully illustrated shortly by Mr. de Garis Davis, the cow also suckles a male child.

⁴ Erman-Grapow, *Wörterbuch d. Aegyptischen Sprache*, p. 11; Alan H. Gardiner, *Egyptian Grammar*, p. 450 E (mammals) 5. M. Alexandre Moret (cited by Thureau-Dangin in *Arslan Tash*, p. 124) points out that the XIIth Dynasty hieroglyph referred to in the *Wörterbuch* does not really correspond, as the cow is seated.

⁵ Ward, *The Seal Cylinders of Western Asia*, No. 415, pp. 157, 158.

Ishtar under her old warlike aspect, while beneath it a small attendant holds a pail and cup for her refreshment. In later Syro-Phoenician Art we can again detect evidences of a similar religious association. Its frequent repetition on ring-stones and signets may itself be taken to imply a protective virtue, indeed in the case of a parallel design on a scaraboid depicting a doe suckling its fawn, the owner has added the words 'Astart'ozzi—Astarté is my strength (or 'salvation').¹ In another case, the Cow and Calf is anti-thetically repeated—as on the Minoan ring (Fig. 515)—on each side of a figure of Thoth,² whose sanction had a special appropriateness in the sealing of letters.

Also connected with Syrian Goddess.

On the other hand, though the group as seen on Syro-Phoenician handiwork—often with a papyrus setting—was, in part at least, derived from Nilotic sources, it clearly points to Minoan influences. In addition to the parallel religious attributions, a correspondence with the Cretan bovine types as often seen on seal-stones has been noted in the repeated folds of the skin of the neck, absent on the Egyptian models. But the remarkable carvings, found in a building outside the Assyrian Palace, at Arslan Tash, near the upper Euphrates, have supplied higher and more artistic standards of comparison.

Who, looking at the Arslan-Tash specimen, here reproduced in Fig. 516,³ and the head of a similar ivory cow from Nimrûd set by it in Fig. 517, can doubt its ultimate attachment to the same natural school that produced the beautiful faïence reliefs of the Temple Repositories at Knossos?⁴ In particular may be noted the similarity presented by the loose-limbed young animal, so realistically rendered in the faïence relief—here reproduced in Fig. 518⁵—to that of the Arslan Tash ivory (Fig. 516) and to another from Nimrûd shown in Fig. 519.

Arslan Tash ivories, influenced by Minoan types.

One of the Arslan Tash ivories bears an Aramaean inscription, from which we know that it was presented by Hazael, King of Damascus,⁶ the contemporary of Salmanasar III, in the latter half of the Ninth Century B.C. But the Arslan Tash ivories themselves, with fine reliefs of the cow and calf and equally beautiful designs of the feeding deer, must be regarded as

Assyrian parallels from Nimrûd.

¹ De Ridder, *Cat. de Clercq*, No. 2510 (Pl. XVII), and cf. Clermont-Ganneau, *Sceaux et Cachets*, 16, pp. 22, 23.

² *Cat. de Clercq*, vii, No. 2799, p. 267.

³ M. Thureau-Dangin, in his excellent remarks on the Syro-Phoenician versions of this motive, observes (*Arslan Tash*, pp. 125, 126) 'On remarquera sur tous ces exemples

les plis de l'encolure.' Equally suggestive of Minoan models are the exquisite reliefs of the fallow deers (*op. cit.*, Pl. XXXVI, Figs. 61, 62).

⁴ See *P. of M.*, i, p. 510 seqq.

⁵ *Ib.*, p. 512, Fig. 369.

⁶ Thureau-Dangin, *Arslan Tash*, p. 135 seqq.

the lineal successors of the fragmentary remains of similar subjects so abundantly forthcoming from Nimrûd,¹ in large part at least, derived from



FIG. 516. IVORY OPENWORK PLAQUE SHOWING COW SUCKLING CALF: ARSLAN TASH.



FIG. 517. HEAD OF SIMILAR IVORY COW: NIMRÛD.



FIG. 518. SUCKLING KID. FRAGMENT OF FAIENCE RELIEF, KNOSSOS.



FIG. 519. SUCKLING CALF: FRAGMENT OF IVORY RELIEF, NIMRÛD.

the North-West Palace. These are generally attributed to the brilliant Age of Ashur-nasir-pal of the first half of the Ninth Century B.C., and therefore, nearly a century earlier.

The fragments here illustrated for comparison (Figs. 518, 519) suffi-

¹ Thanks to the kindness of Mr. Barnett of the Assyrian Department of the British Museum, who is making a special study of the Nimrûd fragments, I was able to look over the very extensive series of the ivory fragments in the reserve store of the Museum. A large number of these belong to the Cow and Calf

group, framed in a manner similar to others of Arslan Tash. They are clearly from more than one deposit, containing remains of various subjects, but there is no evidence as to the circumstances of their discovery. Fragments of the ivory stags are also represented.

ciently show how closely the Nimrūd ivories representing the Cow and Calf group fit on to those of Arslan Tash.

In both cases the true home of the naturalistic school to which this group of ivory carvings belong should surely be sought on the North Syrian Coast, where the contact with Minoan Art is early traceable. There, moreover, as is now known from the discoveries of Ras Shamra and the royal tombs of the neighbouring port of Minet-el-Beida, actual scions of the House of Minos¹ seem to have prolonged a Colonial dominion to a date well beyond that of the fall of the Knossian Palace. The later examples of ivory carvings from this site—notably that of the seated Goddess—find their counterpart in Mycenaean Greece, while, on the other hand, there is observable an approximation in style to those of Enkomi.

Minoan
outpost at
Ras
Shamra.

It is, doubtless, only owing to an accident of discovery that neither the Cypriote nor the Syrian ivories of this class happen to contain an example illustrating the Cow and Calf group, though the bulls of the Enkomi mirror-handles help to fill the gap.

The interval of time that elapsed between the Thirteenth and Ninth Centuries B.C. is still very incompletely bridged, but the reaction of more than one of the schools represented by the Nimrūd relics—as, now, by those of Arslan Tash—on early Ionian Art is well established. The Cow and Calf motive itself appears on a series of Syro-Phoenician seal-stones, as we have seen, with a religious association, and recurs on scarabs with Cypriote Greek inscriptions.²

It was, perhaps, owing to the idea of divine protection and sustenance conveyed by the design that the Cow and Calf motive—taken over, perhaps, from Ionian signets—spread early in the Sixth Century to the archaic coin-dies of Corcyra and other Greek cities.³ In view, however, of the appearance in other cases of what seem to be direct copies of Minoan gem-types,

Cow and
Calf on
archaic
coin dies.

¹ See below, § 113.

² For one of these, said to be from Kurion, &c., Cesnola, *Cyprus*, Pl. XXIII; *P. et C.*, iii, p. 643, Fig. 438; Collitz, *Sammlung griech. Dialektinschriften* (p. 36, No. 70, Deecke). Now in Berlin Coll. (Furtw., *Cat.*, p. 12, No. 109, and Pl. III). The inscription is 'Ku-pa-ra-ko-ra-o' = *Κυπαριόραο*. Another scarab (Myres, *Cesnola Coll.*, No. 4193), where Meister's reading (p. 543) is 'Zo-vo-te-mi-se' = 'Zoothemis'. Myres reads 'Zo-vo-tes-a' = 'Zōteles'.

³ Head, *H.N.*, p. 325, assigns the early staters

of Corcyra to the first period of its independence following the death of Periander of Corinth in 585 B.C. The type appears only slightly later in the Corcyraean Colonies of Dyrrhachion and Apollonia. An archaic version of the Cow and Calf, more or less contemporary with that of Corcyra is found on a class of Macedonian coins akin to those of Lêtê (cf. Imhoof-Blumer, *Monnaies Grecques*, p. 103, and Pl. D, 2). Others with the inscription **EN** are attributed by Imhoof-Blumer to Asia Minor (*Ib.*, p. 104).

it may well be asked whether—over and above the traditional usage of the type, for which a *catena* may be established—this renaissance factor may



FIG. 520. GREEK COINS WITH COW AND CALF TYPE, VTH-IVTH CENTURY, B.C. : *a, b*, MACEDONIA (?); *c*, CORCYRA; *d*, DYRRHACHUM; *e*, WITH INSCRIPTION *EN*. (2)

not also have played a part at least in the more elaborate versions of the motive found on Fifth- and Fourth-century coin-types (see Fig. 520). Such an influence is in fact suggested by the remarkable fact that on the Fifth-century coinage of Corcyra's mother-city, Eretria, a parallel Minoan seal-type, presenting a cow scratching her head, seems certainly to be reproduced. This motive, as shown below, belongs to a characteristic *genre* device applied to a whole group of Minoan animals.¹

Horned Fallow Deer suckling Fawn.

An amethyst lentoid from the Third Shaft Grave at Mycenae² shows the motive applied to a fallow deer, the dapples of which are clearly indi-

¹ See below, p. 550 seqq.

² Schliemann, *Mycenae*, p. 202, Fig. 315, Karo, *Schachtgräber*, &c., Pl. XXIV, No. 15,

and *Text*, p. 59, Fig. 15, who remarks 'Mässige Arbeit nach guten Vorbildern'.

cated (Fig. 521). Horns are here added to the doe's head in the same way as Classical artists gave them to such fabulous animals of the kind as that which suckled Téléphos when exposed by his mother on the steeps of Mount Parthenion.¹



FIG. 521. HORNED FALLOW DEER SUCKLING YOUNG. AMETHYST: MYCENAE.

Maned Lion suckling Cub.

It is curious that this motive of the maned animal giving suck should have been also applied to lions (Fig. 522 *a, b*), and it is interesting to observe that, here too, the parental function is attributed to the male as the best representative

Maned lion suckling cub.

of the lion species. In both cases the animal is provided with a mane.

In the group of the cow and deer the mother licks her suckling, or at least bends her head towards it, and this is also repeated in the lion scheme, as on Fig. 522, *a*.² But at times the



FIG. 522 *a, b*. MANED LIONS SUCKLING YOUNG.

artist seems to have felt a difficulty in attributing too maternal an attitude to the great beast. Here, in one instance, the lion's facing head and neck are stretched downwards, as in the scenes where he leaps on the back of his prey (Fig. 522, *b*).

On this stone the 'impaled triangle' symbol reappears that has been already noted in connexion with the Cow and Calf group. In *a* we see an *Agrim* head and Minoan shield.

¹ The doe of Téléphos is not only depicted with horns in Classical Art, but is so described by Sophocles (*Akad. Fr.* 86). His natural history is gravely corrected by Pollux, v. 76.

² Compare with this a lentoid paste, *Mycenae*

(*Éph. 'Apχ.*, 1888, Pl. X, 32, and p. 178). The animal is described simply as ζῷον by Tsountas, *loc. cit.*, but is certainly a lion. The bead-seal was found in Grave 42. In another case a cub leaps on a lion's back (*Id.*, Pl. X, 17).

Cow (or bull) licking Hind-foot.

Bull lick-
ing hind-
foot.

Among the set pieces of this branch of *genre* designs a very pleasing example is supplied by that depicting a bull licking his hind-foot. This

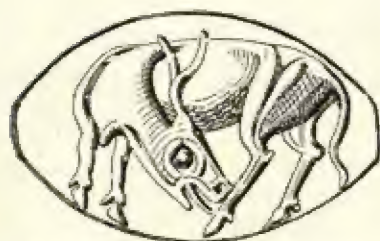


FIG. 523. CORNELIAN LENTOID.



FIG. 524. DARK CORNELIAN.

FIG. 525. SPARTAN BASALT,
CENTRAL CRETE.

motive goes back at least to the early part of the First Late Minoan Period, appearing first in connexion with the true amygdaloid form of bead-seal (Fig. 523).¹ It also occurs on a Vapheio lentoid² and on two other gems, one of dark brown cornelian (Fig. 524),³ and the other of Spartan basalt from Central Crete (Fig. 525).⁴ In these cases the bull's mouth is generally open, with protruding tongue.

Revival
on Coin-
types.

When, about the end of the Eighth Century, B.C., a revival of the gem-engraver's Art set in of which Melos was a centre,⁵ this scheme seems to have had at least a suggestive influence on certain amygdaloid bead-seals, for which it was well adapted.

As a coin-type we see this action of the bull licking its hinder hoof revived in a literal shape on silver staters of Gortyna (Fig. 526),⁶ while other issues of this Cretan city show intermediate versions in which the animal's head is turned towards the raised hind-leg.

FIG. 526. COW LICKING
HINDER HOOF ON COIN
OF ERETIA.

¹ A red cornelian amygdaloid seen by me, from Central Crete.

² Of cornelian with gold mounting, Tsountas, 'Εφ. 'Αρχ., Pl. X, 20.

³ In the British Museum (*Cat.*, Pt. ii, 70).

⁴ Found in 1933: A.E. Coll.

⁵ This 'Melian' class is also of not infrequent occurrence in Corinthia, and is also found throughout Crete, though the stones are

generally smaller. The material chosen was usually the decorative but easily worked translucent soapstone, of a pale green or yellow hue.

⁶ Svoronos, *Numismatique de la Crète ancienne*, Pl. XIV, 12 and Pl. XV (cf. *B. M. Cat.*, Crete, Pl. IX, 10). There are other types in which the head is simply bent towards the leg.

Bull or Cow scratching its Head with its Hoof.

A somewhat parallel design is that in which the bovine animal raises its hind-leg in such a way as to scratch his head with his hoof. An example of this—with the addition of a calf below—on a reddish agate lentoid with rosy veins is given in Fig. 527.¹ It will be seen that the attitude bears a certain analogy to that of the hound scratching itself, which in turn fits on to the type of the wounded calf trying to tear out the arrow with his hind-leg. It corresponds in fact with a recurring device of Minoan artists, and it is therefore a highly suggestive circumstance that, like the Cow and Calf motive, it recurs on a series of early Greek coin-types.



FIG. 527. COW SCRATCHING BACK OF HEAD; CALF BELOW.



FIG. 528. COW SCRATCHING NOSE ON LATE VITH CENT. COIN OF ERETRIA.

Good examples are to be seen on some late Sixth-century silver pieces of Eretria (Fig. 528)² and of its colony Dikaia on the Thermaic Gulf.³

Unlike the case of the Cow and Calf, where there had been a more or less continuous tradition under a religious sanction, we have in both these *genre* motives illustrated by the coin types—after an interval of nearly a millennium—an actual reproduction of a Minoan design long fallen out of use. This revival seems best to be explained by the direct copying of Minoan bead-seals.

Bull with its Head turned against its Side on Seal Impressions from Entrance of 'Royal Tomb' at Isopata.

Such an actual revival seems to be in the same way indicated by some closely related types, of which the coinage of Gortyna supplies good illustrations, where the animal turns its head abruptly against its flank or

¹ From the de Clercq Collection, ii, Pl. V, 97, and p. 37. It is interesting as having been found in the neighbourhood of Antioch.

² From the B.M. Collection; *Cat.*, Pl. XXIII,

Figs. 2 and 4.

³ Imhoof-Blumer, *Griechische Münzen*, Pl. I, 9 and p. 7, from the Greenwell Collection. Now in the British Museum.

Bull scratching head with hoof.

Parallel survival on Coin-type.

still further towards its thigh as if irritated by the bite of a fly, Fig. 529, *a*. These schemes in fact lead up to the beautiful perspective type, *b*, that



FIG. 529 *a*, *b*, *c*. SILVER STATERS OF GORTYNA, VTH CENTURY, B.C.

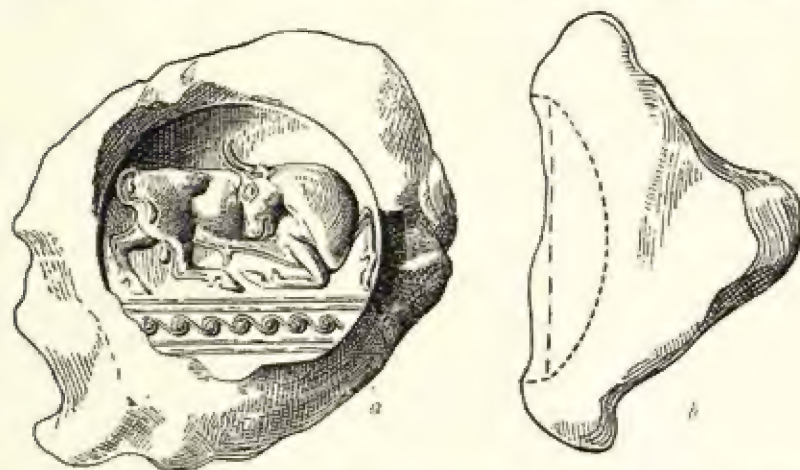


FIG. 530. CLAY SEALING OF WHICH A SERIES WERE FOUND AT ENTRANCE OF ROYAL TOMB, ISOPATA.

marks a speciality of the numismatic Art of Hellenic Crete and for which, again, we are led to seek the suggestion in Minoan seal-stones.¹

The type with the head turned back against the side will be seen to recur at Knossos. A motive in some respects allied to that above described is repeated on a series of clay seal impressions which have a special interest as having been found near the entrance of the 'Royal Tomb' at Isopata, North of Knossos (Fig. 530 *a*, *b*).²

¹ A good instance of a perspective rendering on a Minoan seal-stone is afforded by the design of the *skaros* fish on Fig. 430, p. 494 above.

² A.E., *Prehistoric Tombs of Knossos*, ii, p. 154, Fig. 138, and No. 35. About 12 examples of these sealings were found, some fragmentary.

As will be seen from the section, the clay nodule shows a projection behind, as if it had been pressed into some crevice, but in no cases was there any trace of a string running through the material, such as is frequently found in a carbonized state. That in some way these sealings helped to officially close the doorway of the sepulchral chamber is a reasonable conclusion, and the date—the mature L. M. II phase—is fixed by the fine 'Palace Style' pottery found within the Tomb. It closely corresponds, in fact, with the date of the destruction of the Great Palace itself.

It must be inferred that we have here a design of an architectonic character. The running spiral already, as we have seen, appears on façades as a decorative relief well before the close of the Middle Minoan Age. As a painted design of friezes it enters largely into the scheme of re-decoration carried out about the close of the L. M. I *a* throughout the Domestic Quarter of the Palace. A spiral frieze similar to that of Fig. 530 is seen beneath a group of three warriors bearing 8-shaped shields on a seal impression found beneath the landing of the Stepped Portico of the West Quarter of the Palace.¹

Late Minoan Vogue of True 'Cattle Pieces'.

It is significant of a definite cultural advance in Crete and the Minoan World generally that from the later phase of the First Late Minoan Period (L. M. I *b*) at least, onwards, cattle are no longer

Vogue of true 'Cattle pieces'.



FIG. 531. PARTURITION OF KID SEALING: TEMPLE REPOSITORIES.

simply depicted in connexion with hunting scenes and drives or with the sensational episodes of the bull-ring.² Already by the later phase of M. M. III we begin to have definite evidences of the value attached to stock rearing and cattle breeding. In the Temple Repositories we find a seal impression that apparently portrays the actual parturition of a kid (Fig. 531)—a complement to the act of procreation shown in Suppl. Pl. LIV, *i*. Other sealings, referred to below, with the back view of a recumbent ox, seem to be excerpted from a group by some well-known master that had appeared, we may believe, on the Palace walls by the close of the Middle Period.

Throughout the early part of the Late Minoan Age this bucolic tendency becomes more and more marked. It will be seen, for instance, from the 'Vapheio' deposit that 'Cattle pieces' in the modern agricultural

¹ *P. of M.*, iii, p. 313, and Fig. 204.
IV **

² See *P. of M.*, iii, p. 218 seqq.

sense were already coming into vogue. On a late seal impression from Knossos,¹ we have before us what might well be taken as a scene from



FIG. 532. 'THE PRIZE OX': RESTORED DESIGN ON IMPRESSION, PROBABLY OF GOLD SIGNET (ARCHIVES DEPOSIT), KNOSSOS.

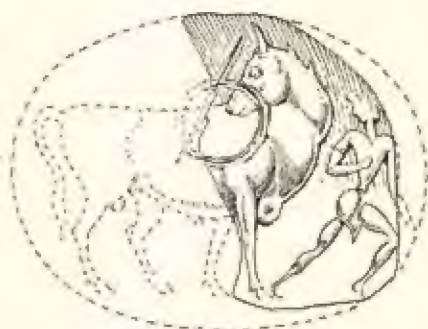


FIG. 533. COUNTERMARKED SEALING (ARCHIVES DEPOSIT): BOY LEADING BEAST.

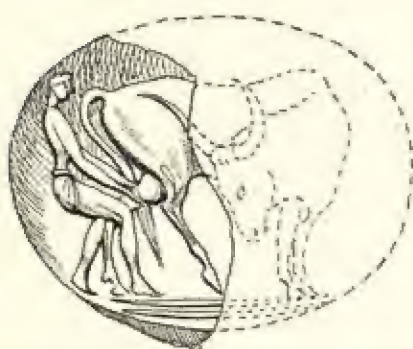


FIG. 534. BOY MILKING COW: FROM SEAL IMPRESSION (ARCHIVES DEPOSIT), KNOSSOS.



FIG. 535. RED JASPER LENTOID.

a cattle show, in which the owner complacently gazes on his prize ox, Fig. 532. On another sealing from the same hoard (Fig. 533), countermarked by a sign of the Linear Class B, a boy is leading a walking beast, and on the complement to this (Fig. 534) another is seen milking a cow. On a red jasper lentoid (Fig. 535)² a male figure, exceptionally clad, guides three oxen, and on the fine Cretan specimen of mottled agate (Fig. 536) a man of muscular build standing behind the animal—like the Minoan Genius of Fig. 368, *b* (p. 443) above—holds in a similar way a rope attached to its horns.³

¹ 'Archives Deposit': see below, pp. 602-4.

² Robinson Collection: and now A.E.

³ B.M. Coll. (*Cat.* no. 79). Furtw., *A.G.*, ii, Pl. VI, 10; iii, p. 49; *J.H.S.*, 1897, Pl. iii,

The cattle piece (Fig. 537) consists of two lowing oxen. Purely bucolic subjects were now the order of the day quite as much as those due to a still surviving taste for the bull-ring.¹

Groups of recumbent cattle without either sensational or religious



FIG. 536. MOTTLLED AGATE LENTOID:
CRETE.



FIG. 537. SARDONYX LENTOID:
CRETE.

associations seem actually to have formed part of the decoration on the palace walls. A design on the gold plate of a ring bezel from Mycenae, here reproduced in Fig. 538, shows the lower part of a group of two couchant oxen, in reversed positions between two vegetable shoots,² on an architectonic base, the separate blocks of which are clearly delineated.

Group of Two Recumbent Oxen, the Hinder partly outlined: Recurrence of Stepped Base.

Among compositions of this class, one which, from its constant repetition, may be thought to depend on some work of the greater Art, is a group consisting of a recumbent ox with another behind it, of which only the back of the head and part of the dorsal outline is visible (Fig. 539).³ Here the natural instinct of the engraver would surely have been to give fuller value to the hinder beast by depicting the front profile of his head⁴ as indeed

Recumbent Ox with another partly outlined behind.

Fig. 2, p. 67. The type and style recalls the Macedonian coins of the Edoni and Orrescii (c. 500 B.C.) where a man—often armed with two spears—stands between two oxen of similar broad proportions with folds to their necks.

¹ See, too, *P. of M.*, i, p. 687, Fig. 503.

² That on the left appears to be a much

conventionalized lily.

³ This specimen was bought by me in Athens, but was said to be of Cretan provenance. On this type cf. *P. of M.*, i, p. 695 and Fig. 517.

⁴ This version, in fact, occurs on a sealing from H. Triáda; D. Levi, *op. cit.*, p. 36, Fig. 80.

is done in variant versions of this motive. But the more usual type is that



FIG. 538. PART OF CATTLE GROUP ON ARCHITECTONIC BASE: GOLD-PLATED RING, MYCENAE. (2).



FIG. 539. TWO OXEN ON 'GRADUATED BASE'. BANDED AGATE; SAID TO BE FROM CRETE. (2).

illustrated in Fig. 539, and it is further to be noted that in these and other cases the group rests on the 'stepped gradation', itself suggested by an architectonic base,¹ such as that more fully shown in Fig. 538. In some cases the stepped base beneath this group is exceptionally clear.² In Fig. 540—a haematite lentoid from the Candia district—one of the recumbent oxen has been stricken by a huntsman's shaft.



FIG. 540. ONE OX STUCK BY SHAFT; CANDIA DISTRICT. (2).

Associated with double gradation of monumental import.

It may be regarded as a conclusive fact that though the insertion of this 'double gradation' beneath the design on lentoid bead-seals is quite exceptional, it appears on seven out of eight specimens of this type that have come under my personal observation, the remaining example—a haematite intaglio from the Knossos district—preserving it in the secondary shape of a single groove. There is then a high probability that the motive owed its wide diffusion to the existence of a well-known work of the kind belonging to a more monumental class.

A version of it is already found on a clay sealing from Hagia Triada, pre-

¹ *P. of M.*, i, p. 686 seqq.

² E.g. Vapheio Tomb, *Εφ. 'Αρχ.*, 1889, Pl. X, 9, 10 (replicas of same design). *P. and C.*, p. 845, Fig. 428, 16 (agate lentoid,

Mycenae). Cf., too, a somewhat hastily executed example of this design on a three-sided agate bead-seal of traditional M. M. III shape, from the Morea (*Berlin Cat.*, No. 49 a).

sumably of L. M. I *a* date,¹ but the approximate epoch of its greatest vogue on seal-stones of this class, as may be gathered from its duplication among the series from the Vapheio interment, belongs to L. M. I *b*. It is almost exclusively confined to lentoids.

The artistic habit of showing oxen with the back of the head turned towards the spectator itself goes back to the closing Middle Minoan phase as may be gathered from a clay seal from the Temple Repositories here reproduced in Fig. 541 *a*.² In that case it is applied, curiously enough, to a single couchant beast. The stricken bull of the fine intaglio design, Fig. 375 *b* above³ on an amygdaloid gem of M. M. III—L. M. I fabric, shows the head turned away in the same manner, and a like feature recurs on clay seal impressions, some of them of the same transitional date, from Hagia Triada.⁴ In some cases the head of the hinder ox is shown in profile.⁵ A fine sardonyx of this type from Central Crete, Fig. 541 *b*, shows two calves.

The original element in this large family of designs surely goes back to some particular sculptural work—prominent perhaps in some Palace Court or façade—that had struck the public fancy. Cattle pieces were clearly in vogue among Minoan sculptors long before the days of Myron's 'Cow'.



FIG. 541 *a*. SEALING FROM TEMPLE REPOSITORIES. (1).



FIG. 541 *b*. CENTRAL CRETE. (1).

Large Sealing with Cattle Group from Northern Entrance Passage Deposit.

A cattle group associated with an elaborate architectural base of religious association occurs in the case of an exceptionally large seal impression, broken away above, found with an extensive deposit of clay tablets of Class B⁶ by the West border, the upper section of the Northern

Large sealing with Cattle group.

¹ D. Levi, *Cretule di Hagia Triada*, &c., p. 36, Fig. 79. The impression is too imperfect to show the form of the original seal-stone.

² *P. of M.*, i, p. 696, Fig. 518, *c*.

³ See above, p. 450.

⁴ D. Levi, *op. cit.*, p. 34, Fig. 74; p. 38, Fig. 82; p. 42, Fig. 97.

⁵ *E.g. Ib.*, p. 36, Fig. 80.

⁶ The sealing was found in the upper level of the area that contained the spiral ceiling. The small deposit of tablets found in association with it belonged to a larger series scattered over a considerable space, and containing numerous 'Chariot Tablets'. (See below, § 114.)

Entrance passage at Knossos. Two walking oxen are here seen above a cornice, the centre of which is supported by the capital of a pilaster while on either side of this are two bull's heads (Fig. 542 a).¹

Frieze
below of
sacrificial
import.

This frieze recalls that on an agate lentoid, here repeated (Fig. 542 b), representing the sacrifice of an ox above the slab of an altar, the face of which shows small pilasters, alternating with *bucrania* rather than simple ox-heads.² Above is a bending palm-tree of a fully conventionalized style, and indicative of a late date.

¹ They somewhat resemble the heads of horned sheep, but facing bull's heads of this type are also known.

² See above, p. 41, Fig. 24. The true character of the frieze below was first recognized

in my *Scripta Minoa*, i, p. 196, Fig. 99, in connexion with the 'bucranium' hieroglyph. The gem is in the Berlin Museum (Furtw., *Cat.*, Pl. I, 22; cf. *A. G.*, Pl. II, 22).

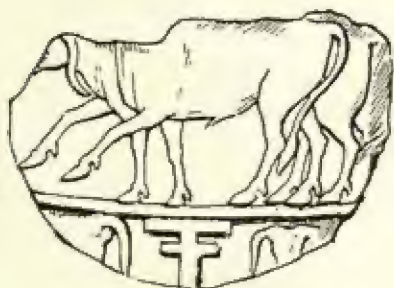


FIG. 542 a. SEAL IMPRESSION:
N. ENTRANCE PASSAGE.



FIG. 542 b. SACRIFICE OF
OX WITH BUCRANIA ON
ALTAR TABLE.

§ 107. HUNTING AND OTHER ANIMAL TYPES ON LATE MINOAN SEALS:
INFLUENCE OF ORIENTAL CYLINDER SCHEMES AND EVOLUTION OF THE
'LENTOID' CLASS OF DESIGNS.

Cretan horned sheep—its sacral aspects; Lassoing scene; Domestic swine; Boar laid out for sacrifice; Hunting of wild boars—use of net; Huntsman spearing boar; Warriors attacking lion—military aspect of sport; Spearman and archer on Kydonia seal—lion hunt on dagger-blade compared; Huntsman stabbing Agrimi; Minoan Goddess, as Diktynna, pursuing stag with bow; The fallow deer represented in Minoan Art; Stag-hunting in chariot on Mycenae signet—royal sport; Ladies in Tiryns Fresco; Hunting-dogs on Fresco and seals—greyhound type; Prominence of lion motives on L. M. seals; Lion holding up bull, as Minoan Genius; Reflections of Oriental cylinder types, Gilgamesh and Eabani; Frequency of Lions' Gate scheme from L. M. I b onwards; Single-headed and two-bodied Lions' Gate type—bizarre variation; Crossing animals; Lions seizing stag and fighting for quarry; Adaptation of designs to circular field of lentoids; Coiled and contorted animal figures; 'Acrobatic' Minotaur type; Evolution of 'lentoid' style.

Horned Sheep.

Amongst animal types on signets already illustrated in this work the large horned sheep, probably the Anatolian or Cyprian variety, has a prominent place. That this existed in the Island in at any rate a half wild state is shown by the red cornelian amygdaloid gem, Fig. 543, obtained by me at Kastri near Turloti in East Crete in 1896, in which a huntsman, whose loin-clothing is exceptional, consisting of a simple kilt, is seen lassoing a huge animal of this kind, while in the act of suckling its young.¹ As noted

Cretan
horned
sheep.



FIG. 543. HUNTER LASSOING
HORNED EWE WHILE SUCKLING
HER LAMB. CORNELIAN; KASTRI.

in Volume I of this work, where various intaglios are referred to exhibiting the animal, a seal-type from the clay impressions found in the Temple Repositories,² here reproduced in Fig. 544, *a*, shows this animal

¹ See *P. of M.*, i, pp. 684-5 (from which Figs. 543, 546, 547 are here reproduced).

² *Ib.*, p. 696, Fig. 518, *b*.

beside, apparently, a trough, and a *swastika* sign in the field above, to be in this case legitimately regarded as a religious symbol. This sacral indication may be now supplemented by a sealing from the 'Archives Deposit'



FIG. 544. INTAGLIO TYPES SHOWING HORNED SHEEP ASSOCIATED WITH SACRED SYMBOLS: *a*, SEALING, TEMPLE REPOSITORIES, KNOSSOS; *b*, JASPER LENTOID, SITEIA; *c*, *do.* 'S.W. BASEMENT' DEPOSIT.

Its sacral aspects.

of the close of the Palace Period, Fig. 544, *c*, where a horned sheep is grouped with a Cretan wild-goat between the shield and 'impaled-triangle' symbol.¹ In this connexion it is interesting to observe that on the jasper lentoid from Siteia in Eastern Crete,² Fig. 544, *b*, there is introduced between two horned sheep in reversed positions a character representing (with a spur attached) the common H sign of the Linear Class B, which is itself derived, through preceding intermediary forms, from the hieroglyph representing a sacred Double Axe.³ Its religious significance is further confirmed by the recurrence of the H sign as a mark of dedication. A direct votive connexion of the horned sheep with the Minoan Goddess, parallel to that of the Cretan wild-goat, is well illustrated by the fine cornelian lentoid from the Vapheio Tomb (Fig. 545)⁴ where the Goddess appears actually holding it up. Similar evidences of the special dedication of the *agrimè* or Cretan wild-goat are of constant recurrence. On two intaglios, indeed, from the same Vapheio deposit, the Goddess or a female ministrant holds up an

¹ See below, p. 604.

² In the Candia Museum, St. Xanthudides, Κρητικά Σφραγίδες, &c.; 'Εφ. 'Αρχ., 1907, Pl. VII, 103, and p. 176.

³ For the intermediate links see *P. of M.*, i, p. 643, Fig. 477, No. 12.

⁴ Tsountas, 'Εφ. 'Αρχ., 1889, Pl. X, 34; P. et C., vi, p. 843, Fig. 426, 14; Furtwängler, *A. G.*, Pl. II, p. 25, and Vol. ii, p. 25, where he rightly observes 'Die Frau ist offenbar eine Göttin und der Widder ihr heiliges Tier (= Aphrodite?)'.

offertory ram, and the motive reappears on cylinders of the late 'Cypro-Minoan' class.¹ Twice, too, the ram appears tied to the baetylic column.²

Probably the best illustration of the horned sheep itself is supplied by



FIG. 545. GODDESS OR VOTARY HOLDING OFFERTORY RAM
CORNELIAN: VAPHIO.



FIG. 546. HORNED SHEEP ON 'FLAT CYLINDER' OF RED
CORNELIAN: LYKTOS.



FIG. 547. CHALCEDONY LENTOID, LASITHI.

a 'flat' cylinder (Fig. 546) found on or near the site of Lyktos.³ In particular the shaggy breast of this species is here well given. This intaglio, moreover, is of particular interest as supplying a good example of reserved background, such as marks the best period of the Minoan gem-engravers' Art. Another good example of the animal is to be seen on the 'flat-sided' lentoid from Lasithi⁴ (Fig. 547), with M.M. III façade decoration.

Of special interest in its bearing on the later traditions of the Cretan Zeus and eponymic heroes, like Kydôn, suckled by animals, is the early type represented on a sealing from the Hieroglyphic deposit, already referred to in the first Volume of this work, in which a naked child is seated beneath a horned sheep, perhaps also before a manger (Fig. 544, a).⁵

Wild Boars and Domestic Swine.

In the absence of special indications it is often a moot point where animals like sheep or goats are depicted whether they are to be regarded as wild or domesticated. This difficulty occurs with regard to some representations of boars or pigs, such as are already a favourite motive of Minoan seals on the prism seals of the Early Minoan Age. When, as on

Domestic swine.

¹ E.g. Cesnola, *Salamina*, Pl. XII, 1; Ohnefalsch-Richter, *Kypros*, &c., Pl. LXXIX, 6.

² On an onyx lentoid from the 'Chieftain's Grave', Knossos, and another from near Gor-

tyna (A. E. Coll.) of practically identical fabric

³ See *P. of M.*, i, p. 684, Fig. 503, a.

⁴ *Ibid.*, p. 684, Fig. 503, b.

⁵ *Ib.*, p. 273, Fig. 202, c.

a somewhat later prism of the hieroglyphic class, we see the animal coupled with a gate or door its domestic character seems to be well assured.¹ On a sealing from Hagia Triada (Fig. 548),² beneath figures of two large swine,

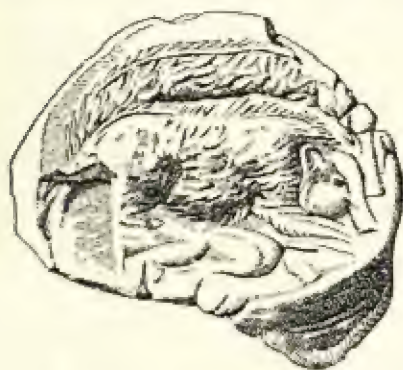


FIG. 548. TWO SWINE WITH LITTER BELOW. SEALING: H. TRIADA.



FIG. 549. GROUP OF THREE SWINE: LENTOID CORNELIAN.

may be discerned a whole litter of little pigs. A couchant boar with the upper outline of another is of common occurrence, and on a haematite lentoid from near the Argive Heraeum³ this device is coupled on the other side

with the seated oxen motive shown in Fig. 539 above, suggesting that the swine, too, are of the domestic kind. On a fine cornelian lentoid, 'from an island of the Archipelago',⁴ appear two seated boars, with the head of a third looking in the opposite direction (Fig. 549). That pigs formed an important item in Minoan stock is shown by the Palace inventories.

Sacrifice
of boar.

That this animal also served a sacrificial purpose is clear from the agate lentoid from a chamber tomb at Mycenae (Fig. 550).⁵ Here a long-robed personage belonging, it would appear, to the priestly caste described in Section 101 above, stands, knife in hand, about to make an incision in the lower abdomen of a huge boar—evidently already slaughtered—placed on a table like that upon which in other cases sacrificed oxen are set. On an agate lentoid (see above, Fig. 542 *b*)⁶, an ox, with a knife sticking into his neck (a proof that he had been already sacrificed), is laid on a table

¹ A.E., *Scripta Minoa*, Pl. II, p. 22, *a*.

² D. Levi, *Cretule*, on p. 43, Fig. 98: The lower part of the sealing is there, however, interpreted as inequalities of the soil ('Il suolo è accennato da ampie e sconvolte zolle di terra').

³ Furtwängler, *A. G.*, Pl. III, 18. The design on both sides of this lentoid rests on a 'triple gradation'.

⁴ E. Babelon, *Collection Pauvert de la Chapelle*, Pl. I, 6, and p. 2. The base

which supports this design shows a transverse wavy decoration recalling the conventional representation of stone work on Late Minoan frescoes—as for instance, below the Griffins on the walls of the 'Throne Room' at Knossos.

⁵ Tsountas, *Εφ. Ἀρχ.*, 1888, Pl. X, 36 (upside down); Furtw. *A. G.*, Pl. II, 18.

⁶ P. 568.

of the same kind.¹ There are, indeed several parallel examples of bulls or oxen laid out on similar sacrificial tables. The animal is depicted as already slaughtered.

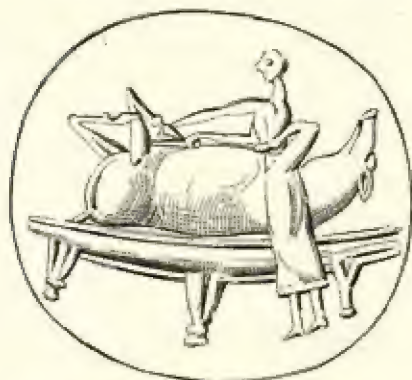


FIG. 550. PRIESTLY PERSONAGE IN LONG ROBE ABOUT TO MAKE HARUSPICAL INCISION ON BOAR LAID ON SACRIFICIAL TABLE. AGATE LENTOID: MYCENAE.

The rite performed with the sacrificed boar may be certainly taken to show that divination by the entrails of victims was practised by Minoan priests—an interesting anticipation of Etruscan *haruspices*.

Hunting of Wild Boars.

On the other hand we have also to deal with the animal in his wild state. In Late Minoan Art 'pig-sticking' scenes are not infrequent. On a chalcedony lentoid from the Vapheio Tomb² the hunter checks a charging wild boar with a spear-thrust on the front of his head, the scene being laid beneath a canopy of rocks (Fig. 551). In this case the design of

Hunting of wild boars.



FIG. 551. VAPHEIO GEM SHOWING BOAR BENEATH ROCKS.

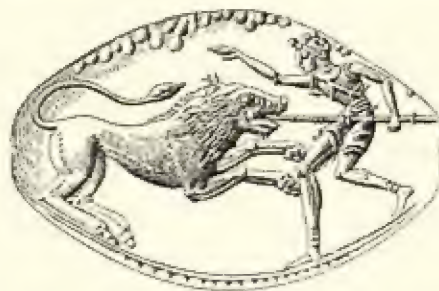


FIG. 552. GOLD BEAD-SEAL: HUNTSMAN SPEARING CHARGING LION: THISBÊ.

the huntsman is much inferior to the spirited representation of the animal itself. A similar scene recurs on a cornelian amygdaloid from the Peloponnese.³ The Thisbê bead-seal,⁴ in which a spearman thrusts his weapon into the mouth of a charging lion, is here given for comparison (Fig. 552).

The fine relief of a steatite vessel, originally gold plated, from

¹ Furtwängler, *A. G.*, Pl. II, 22 (*Berlin Cat.*, No. 21, Pl. I). In Imhoof-Blumer und Keller, *Tier u. Pflanzenbilder*, p. 110, the animal is wrongly identified with an antelope, as Furtwängler pointed out: from the De

Montigny Collection.

² *Ép.* 'ApX., 1887, Pl. X, 15, &c.

³ Furtw., *A. G.*, II, Pl. II, 12.

⁴ *A. E.*, *Ring of Nestor, &c.*, p. 35, Fig. 76.

Palaikastro, showing the fore-part of a boar charging over rocky ground,¹ itself belonging to the transitional phase of M. M. III—L. M. I a Art, may well stand in relation to fuller scenes in painted relief already existing on



FIG. 553. BULL CAUGHT IN NET. CLAY SEAL IMPRESSION: H. TRIADA.



FIG. 554. BULL BREAKING THROUGH FENCE. CLAY SEAL IMPRESSION: H. TRIADA.

palatial walls. The Tiryns fresco,² indeed, proves that boar-hunting subjects were in vogue in 'Mycenaean' Greece at a much later date.

Use of
net.

On the fresco we see the boar driven into a net, as in Horace's Italy. This, too, recalls the capture of the wild bull in a net drawn from tree to tree across the forest drive, as seen on one of the Vapheio Cups.³ The subject, indeed, is illustrated on a clay sealing of Hagia Triada⁴ (Fig. 553), but there is no evidence here of any relation to the Vapheio composition such as there seems to be in other intaglio types. As a supplementary illustration of such scenes, Fig. 554, from a seal impression in the same Deposit,⁵ is here added in which a bull butts his way through a fence.

Lion-hunting Scenes.

Warriors
attacking
lion.

Other kindred types already illustrated, such as that on a bead-seal from the Third Shaft Grave at Mycenae,⁶ show a warrior attacking a half-reared lion with a short sword. In the analogous motive on an agate cylinder from Nestor's Pylos, where the lion stands bolt upright on his hind legs, the hero who stabs it appears in an identical guise. In that

¹ *P. of M.*, i, p. 676, Fig. 496.

² Rodenwaldt, *Tiryns*, ii, p. 125 seqq., Fig. 55, Pl. XIII and p. 126, No. 2.

³ See *P. of M.*, iii, opp. p. 178, Fig. 123 A, and cf. p. 180, Fig. 124.

⁴ D. Levi, *Cretule di Hagia Triada*, p. 37, Fig. 81. A contorted design of a bull of the lentoid class, Suppl. Pl. I.V, and Fig. 581,

below, show a great uniformity with the Vapheio design, though the net is omitted. On another sealing from the same hoard a bull approaches the net warily (*Ib.*, p. 38, Fig. 82).

⁵ *Ib.*, p. 35, Fig. 76.

⁶ *P. of M.*, iii, p. 125, Fig. 78; imitated by a Hellenistic engraver of Kydonia (*Ib.*, Fig. 79).

case, indeed, he receives supernatural aid from a Minoan Genius, who grasps the sheath of his dirk as if to give a magical direction to his stroke. On a lentoid bead-seal, Fig. 555,¹ a spearman attacks a lion in the same erect position, wearing a crested conical helmet of exactly the same shape as is worn by the Knossian warriors on a sealing from the 'Archives Deposit'. This crested head-piece reappears on the Minoan soldiers shown in the course of disembarkment in the siege scene on the Mycenae 'rhyton'. Contrary to statements sometimes made, its setting with boars' tusks seems to have been common to Crete as well as the Peloponnese.



FIG. 555. SPEARMAN IN PEAKED HELMET ATTACKING LION. (?)



FIG. 556. WARRIOR ARMED WITH SPEAR AND SHIELD AND ARCHER ATTACKING LION. RED JASPER: KYDONIA.



FIG. 557. SECTION OF INLAID DAGGER-BLADE FROM FOURTH SHAFT GRAVE, MYCENAE: WARRIOR ATTACKING LION.

The military character of this form of sport has already received full illustration from the spirited composition on the dagger-blade from the Fourth Shaft Grave (Fig. 557). There four warriors, armed with spear, bow, and shield, attack a troop of three lions, the hindmost of

Military aspect of sport, illustrated by dagger scene.

¹ Cabinet des Médailles, M. 6673. D. Levi, *op. cit.*, p. 132, note 1, referring to this intaglio, describes the helmet as being provided with cheek pieces. This, however, is not the case.

which turns on the pursuers—an incident that, as pointed out, curiously resembles scenes in the real war which African natives, armed only with weapons of similar ancient types, are forced to wage against the King of Beasts.¹

Spear-
man and
archer
attacking
lion on
Kydonia
seal.

There is, indeed, direct evidence that such fuller compositions as those of this 'painting' in metals were actually drawn on by Minoan seal-engravers within their narrower limits. A 'flat cylinder' of red jasper (Fig. 556), found on or near the site of Kydonia,² presents a scene of two warriors—a spearman with an 8-shaped Minoan shield slung on his shoulder and an archer who draws his bow in a half-kneeling attitude—attacking a lion standing erect like the preceding. Except that in this case the shield is slung in front of the first figure instead of behind his back, we may here certainly recognize a reflection of the first two figures of the attacking force as seen in the completed form of the design supplied by the dagger-blade. The rocky slope under the spearman's feet and the little eminences on each side of the lion's leg seen on the intaglio are absent from the engraved design of the dagger-blade, but are quite in keeping with this class of work. They may ultimately point to a still more picturesquely developed illustration of the same once existing in a fresco painting on a palace wall.

An acute observation made by Dr. Rodenwaldt³ with regard to the Tiryns frescoes of considerably later date tends to show that this inlaying technique in metal-work had reacted on the larger Art. In the case, for instance, of the boar's body there seen the lighter band below it gradually narrows towards the hindquarters in the characteristic fashion observable in the case of the lions, gazelles, and other animals of the inlaid dagger-blades.

Huntsman stabbing *Agrimi*.

Hunts-
man
stabbing
Agrimi.

The Cretan hunter on the agate lentoid from Mirabello,⁴ reproduced in Fig. 558, deals with the uprearing and truly monstrous *agrimi* with a thrust from his short sword or dirk, much as the lion-hunters in similar scenes. On the boldly-cut agate from Hagia Pelagia, on the North Coast

¹ See *P. of M.*, iii, pp. 122, 123.

² This, like the preceding, Fig. 555, is from a cast kindly supplied me by Monsieur A. David of the Cabinet des Médailles. It is also published by Dr. Doro Levi, *op. cit.*,

pp. 131, 132, and Fig. 245. The stone was obtained at Canea.

³ *Tiryns*, ii, p. 127, and cf. Fig. 35, p. 124.

⁴ See, too, above, p. 492, and Fig. 428.

of Central Crete¹—the 'elongated' amygdaloid form of which is parallel with some Vapheio types—the assailant has overcome a similar great beast, gripping him by a horn while he thrusts his blade into its cervical vertebrae (Fig. 559).



FIG. 558. HUNTSMAN STABBING *AGRIMI*. AGATE LENTOID: MIRABELLO, CRETE. (SO, TOO, FIG. 428, P. 492).



FIG. 559. HUNTSMAN STABBING OVERTHROWN *AGRIMI*. ELONGATED AMYGDALOID OF AGATE: H. PELAGIA, CRETE. (3).

Stag Hunts.

Of the use of the bow to bring down the wild-goat pursued by a hound, we have an early record in the ivory half-cylinder of M. M. I *a* date.² The huntress, of matronly proportions, who appears on a Late Minoan cornelian intaglio from Crete (Fig. 560),³ is surely the Goddess herself in the form

Minoan goddess as Diktyнна pursuing stag with bow.



FIG. 560. CRETAN GODDESS AS ARTEMIS (DIKTYNNNA) DRAWING BOW.



FIG. 561. GODDESS AS DIKTYNNNA SHOOTING STAG WITH BOW OF ASIATIC TYPE. GOLD BEAD-SEAL: THISSÊ.



FIG. 562. HUNTED STAG WITH SACRAL KNOTS ABOVE. SEAL IMPRESSION FROM 'ARCHIVES DEPOSIT', KNOSSOS.

perpetuated by the later Diktyнна, whether her quarry be in this case wild-goat or deer. Her divine character is, in fact, implied by the 'sacral

¹ For Hagia Pelagia, cf. *P. of M.*, ii, pp. 251, 252.

² See above, p. 523, Fig. 469.

³ See *P. of M.*, i, pp. 432-4.

knots'¹ (here clumsily defined) that are attached to her shoulders.² An interesting complement to this design is supplied, indeed, by a clay seal impression from the late Palatial 'Archives Deposit' at Knossos,³ Fig. 562, showing a running stag, above which are inserted a pair of these 'knots' associating it thus with the Goddess. This is a good instance of the abbreviated forms of expression imposed on the gem-engraver's Art.

Finally, in the fuller field afforded by the oval of a gold bead from the Thisbê Treasure (Fig. 561)⁴ we see the completed design of a personage who, from her rich attire and the apparent crown that she wears, may, again, be taken to be the Goddess—though, in this case, she is more practically attired—shooting a stag with a bow of the composite Asiatic class. An interesting peculiarity in this figure is that she is turned round in such a way as to present her back to the spectator. She is not here adorned with the 'sacral knots', but wears a quiver, suspended from her left shoulder.

In a variant form this was a favourite attitude of Artemis with Hellenistic artists.

Here as in other cases the palmation is that of the fallow deer, whose dapples seem also to be indicated. This species (*Cervus dama*), indeed—spotted and broad-horned—is the only one well-ascertained in Minoan representations.⁵ This conclusion is of great interest in view of the fact that throughout all historic and late prehistoric times the only species of wild deer known in Greece—as in Europe generally—has been the red deer (*Cervus elaphus*).⁶ The fallow deer, which is well represented on Cretan seal-types, going back to Middle Minoan times, and survives itself in some of the

The fallow deer (*Cervus dama*) represented in Minoan Art.

¹ Furtwängler, *A.G.*, Pl. II, 24 (and see his *Berlin Cat.*, p. 3, No. 2).

² See my *Ring of Nestor*, &c., p. 22, where the gem is reproduced in Fig. 22. Furtwängler who, doubtfully, regarded the object (at that time impossible of recognition) as a quiver, would have been confirmed in his vow that the figure represented Diktynna.

³ See below, p. 609, Fig. 597 n. l.

⁴ *Ring of Nestor*, &c., pp. 21-3, and Fig. 24.

⁵ See on this Imhoof-Blumer und Keller. The stag on the amethyst intaglio from the Third Shaft Grave at Mycenae is, indeed, described by O. Keller as a red deer, but the dapples are clearly indicated (see my note, *Ring of Nestor*, &c., (Macquillans), 1925, p. 10). For references to representations of deer on

Minoan and 'Mycenaean' seal-stones and objects see Rodenwaldt, *Tiryns*, ii, p. 151, n. 1. The only object from Mycenae that is clearly a red deer is the silver and lead vessel from the Fourth Shaft Grave. For this see now, Karo, *Schachtgräber*, Pl. CXV, *Text*, p. 94, who shows that there was no outlet at the mouth and that it was not, therefore, a true 'rhyton'. The form of the vessel thus answers to an Early Cycladic marble type.

⁶ On the Tiryns fresco these are conventionally rendered by crosses like the cruciform star symbols on the Hathoric cow (see *P. of M.*, i, pp. 513, 514, and Fig. 370, A-C). This convention was also taken over in L. M. III Ceramic Art.

Aegean islands, seems to have had a more Easterly and Southern range, extending still to Anatolia and Northern Africa. Two heads of gold pins of Cycladic type from the Fourth Mycenae Shaft Grave—as is shown by the angle at which the tine springs—represent the antlers of fallow deer (Fig. 563, *a*, *b*).¹



FIG. 563, *a*, *b*. HEADS OF GOLD PINS FROM IVTH SHAFT GRAVE, MYCENAE, COMPARED WITH ANTLER OF FALLOW DEER.

On the gold signet-ring from the Fourth Shaft Grave of Mycenae, what is most probably a royal male personage in a chariot, with an early 'box' body, is seen driven at full gallop by his charioteer, while he aims an arrow at a leaping stag (Fig. 564).

Royal stag-hunting in chariot: Mycenae signet.



FIG. 564. ROYAL MALE PERSONAGE HUNTING STAG IN CHARIOT IN A ROCKY GLEN. GOLD SIGNET-RING FROM FOURTH SHAFT GRAVE, MYCENAE.

Deer had existed in Crete from very early times, and it is natural to suppose that the bow had there also served the Minoan Goddess in the chase. In spite, however, of the wholesale use of the chariot by the latest Palace lords of Knossos, of which the clay tablets of the Linear Class B have supplied so much evidence,² it is difficult to believe that the Oriental usage, affected by the Mainland princes, of taking part in the hunt in chariots could have had anything but the most limited and artificial vogue.

The great plain of Mesarà in the South of the Island, indeed, was quite as well adapted as that of Argos to make this form of the sport possible and it is tempting to bring the female personages with diadems of

¹ See A.E., *Shaft Grave of Mycenae*, p. 45, Fig. 351. This was an imported South East Mediterranean species, foreign to Mainland Greece.

² See below, § 114.

Lady
hunters in
chariots
on Tiryns
fresco.

the lily-crown class who are seen driving chariots of the late Knossian kind at the ends of the Hagia Triada Sarcophagus¹ into connexion with the dappled deer seen on a fragment of a painted frieze² near the neighbouring Palace. The Tiryns frescoes, belonging to a still later date, repeat the same form of chariot, drawn by horses, similarly caparisoned, in which ladies—in this case dressed according to Minoan sporting fashion, in male costume—follow the stag-hunt.³

The Minoan Greyhounds and their Sacral Connexion.

The dogs who accompany the Tirynthian huntresses, collared and held on leash by grooms in Mainland dress, are clearly greyhounds.⁴

Hunting-
dogs on
fresco and
seals:
Grey-
hound
type.

As will be seen from the restored fragment, Fig. 565—notably the head, with the ears exceptionally rendered, as if half fallen,⁵ and its long muzzle—the animal at once suggests a close resemblance to the English greyhound. The build, as in that case, is at once slender and strong. The body, so far as the fragmentary evidence enables us to complete it, is short-haired and smooth, but on the other hand, the tail has a well-marked fringe of hair like that of the more hairy Persian breed.⁶

The nearest glyptic parallel to the hound of the fresco is supplied by a clay seal impression, unfortunately incomplete below. On this, the young male God, as we may interpret the figure, stands between two dogs antithetically seated, holding a short cord attached to the collar of each (Fig. 566).⁷ In this case the resemblance is enhanced by the ears thrown back against the side of the neck. A constantly recurring design on seal impressions in the later palatial deposits of Knossos is a collared bitch of somewhat solid build with the ears, again, thrown back (Fig. 567). Otherwise, the dogs are mostly prick-eared, the body and legs resembling those of the ordinary greyhound.

On the green jasper lentoid from Central Crete (Fig. 569), we

¹ R. Paribeni, *Il Sarcophago dipinto di Hagia Triada*, Pl. III (*Mon. Ant.*, xix, 1908). In one case a pair of Griffins is substituted for the horses.

² *Ib.*, p. 71, Fig. 22.

³ Rodenwaldt, *Tiryns*, ii, Pl. XII, p. 97 seqq. and Fig. 40. Dr. Rodenwaldt (p. 108) noted the male character of their costume.

⁴ *Ib.*, p. 110, Fig. 47, and Pl. XIV, 6. The boarhounds are of a different breed.

⁵ In this case, however, the ears begin by bending down and then become more or less horizontal, while the true greyhound's ear shoots up before falling. It looks as if the Tiryns artist had shown some confusion in dealing with an unusual form of ear.

⁶ The modern Greek greyhounds are still shaggier.

⁷ See *P. of M.*, ii, Pt. II, p. 765, and Fig. 495.



FIG. 566. YOUNG MALE DIVINITY BETWEEN TWO COLLARED HOUNDS, EACH OF WHOM HE HOLDS BY A CORD ROUND THE NECK. SEAL IMPRESSION: 'ARCHIVES DEPOSIT'.



FIG. 567. COLLARED BITCH. LATE PALATIAL SEAL IMPRESSION: KNOSSOS.



FIG. 565. GROOM WITH COLLARED HOUND FROM STAG-HUNTING FRESCO, TIRYNS.



FIG. 568. HOUND ON BASE: FLYING BIRD AND 'IMPALED TRIANGLE' SYMBOL. HAEMATITE LENTOID: CRETE.



FIG. 569. COLLARED HOUND AND ATTENDANT. JASPER LENTOID: CENTRAL CRETE.

even see a similar subject to that of the fresco.¹ The groom—here in the ordinary Minoan attire and very diminutive in comparison with the hound behind which he stands—lays his hands on its collar. It is a collared bitch of this breed which is seen scratching the underside of her chin on the red jasper bead seal, Fig. 505 above,² as well as that which seizes the stag on the haematite lentoid, Fig. 471.³ This latter design, indeed, is of special value, since the small seated figure of a similar hound below—posed as if one of a pair with their forefeet on an altar base⁴—is itself placed beside a baetylic pillar, showing the sacred character of the animal. On the lentoid (also, like the preceding, of haematite), Fig. 568, we see a dog of the same kind standing on a double base with the impaled triangle—certainly a religious symbol—above. In front is a flying bird. The sacral associations of the Minoan greyhound are clear. It was dogs of this breed who accompanied the Goddess when, bow in hand—whether on foot or in her chariot—she pursued the wild-goat or the deer.

Prominence of Lion Motives on Late Minoan Seals.

Promi-
nence of
Lion
motives
on L. M.
seals.

But it is the lion that comes into more special prominence during the early part of the Late Minoan Age. This was a natural consequence of the extended dominion on the Mainland side, and it is a noteworthy circumstance that *pari passu* with the popularity of the King of Beasts on signet types, there seems to have been a certain falling off in the vogue—so conspicuous in the great transitional M. M. III-L. M. I epoch—of the scenes of the bull-ring and the feats of Minoan cowboys. To the end of the Palace period, however, good examples of these are still to be found, as is shown by the seal impressions, Fig. 597 v, *k* and *n*, p. 609, below.

In addition to the characteristic schemes described above in which the lion grips his quarry, he is now depicted in a great variety of aspects, some of them of a peaceful and picturesque character akin to that of the cattle pieces. On a lentoid from Mycenae⁵ we see a pair seated in a palm grove, only so far alert that they gaze in opposite directions. On a haematite bead-seal

¹ Cf. too, my *Tomb of the Double Axes*, &c., pp. 9, 10, where the type is compared with that on a chalcedony 'flat cylinder' depicting a mastiff-like collared animal with a small male figure behind. The rounded ears of the animal, however, show some confusion with the lion type.

² See p. 545. On a grey stone lentoid in my collection a similar bitch is in the act of

springing.

³ P. 524, above.

⁴ On a common seal-type of the late Palatial deposits dogs of thicker build and with bushy tails are confronted in this fashion (p. 608, Fig. 597 A, *g* below).

⁵ Of sardonyx, from a chamber tomb Furtw., *A.G.*, iii, 16.

of the 'elongated amygdaloid' type (Fig. 570) from Central Crete,¹ they are couchant in reversed positions, just as elsewhere we see two oxen. The

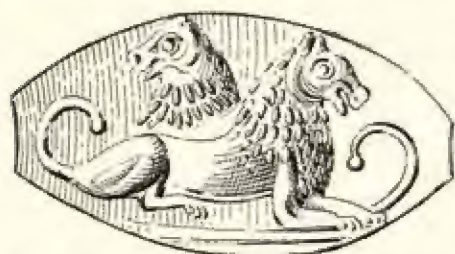


FIG. 570. TWO LIONS COUCHANT. HAEMATITE AMYGDALOID; CENTRAL CRETE.

attitude of the lion on another lentoid from Mycenae has an almost playful look.

More generally, however, they are depicted as beasts of prey, sometimes, as we have seen, as the subjects of heroic 'gestes', but oftener as attacking other animals. Of the schemes in which the lion springs upon his quarry enough will have been said in a preceding Section; among the select Late Minoan intaglios set forth in Suppl. Pl. LV the finely engraved lentoid² on which he is shown seizing a stag is photographically reproduced.

In Fig. 571—a green jasper lentoid, said to have been found at Athens³—the lion, in a half-standing position, grips a bull by the neck. In

Lion holding up bull-like Minoan genius.



FIG. 571. LION GRIPPING BULL BY NECK. GREEN JASPER; ATHENS. ($\frac{1}{2}$).



FIG. 572. LION HOLDING UP A WILD-GOAT IN HIS JAWS. GREEN JASPER; CRETE. ($\frac{1}{2}$).

Fig. 572⁴ he holds the whole animal up, like a monster retriever, as also on a lentoid bead-seal of green jasper, also from Crete,⁵ where the 'sacral knot' is introduced below (Suppl. Pl. LV, c). The lion is, in these cases, depicted

¹ Acquired by me in 1888.

² See above, p. 532, Fig. 481. It is there enlarged to three diameters.

³ It was obtained by me there, and said to be a local find. There is a triple, trailing object beneath the lion not easily explained.

⁴ On a green jasper lentoid shot with red.

⁵ In the British Museum (*Cat.*, 1926, Pl. I, 43); Furtw., *A.G.*, Pl. III, 7; Imhoof-Blumer und Keller, *Tier- und Pflanzenbilder*, Pl. XIV, 28, and p. 86. The idea of carrying off of the quarry is missed in the description, *B.M. Cat.*,

as actually serving a divine behest and carrying the quarry in a manner analogous to that illustrated by the Minoan Genius of Fig. 358, *b*, p. 435, above. Beside this, on the Plate are set the pair of closely related designs in which respectively a daemon guides a bull and a cow.¹ These intaglios and the fine groups above them illustrating lions and their prey may all be referred to the mature style (L. M. I *b*) of the First Late Minoan Period.

Examples of Oriental Cylinder Designs reflected on Minoan Seal-types.

The general conclusion arrived at in Section 106 *a* above, that the scheme of the lion seizing his prey—whether bull or stag—was, in its most

Reflec-
tions of
Oriental
cylinder
types;
Gilgam-
esh and
Eabani.



FIG. 573. BEARDED HERO (REFLECTION OF GILGAMESH) HOLDING UP TWO LIONS. JASPER SIGNET-RING; MYCENAE. FROM A DRAWING BY MONS. GILLIÉRON, FILS.



FIG. 574. TWO HEROES COMBATING LIONS. GOLD SIGNET-RING; PÉRONNE MUSEUM.

characteristic shape, of indigenous Cretan origin, does not exclude the fact that in certain cases there are undoubted examples of reaction of cylinder designs of old Oriental tradition on Minoan seal-types.² We have only to recall the bezel of the jasper ring from Mycenae, Fig. 573, where a hero, the direct reflection of Gilgamesh, holds up two lions, one by the hind-legs and the other by the throat. On a Babylonian cylinder³ we see the bearded hero holding up two lions in a similar manner, in this case, indeed, both by their hind-legs. Or, again, Gilgamesh is associated with

p. 6 (1926). The 'sacral knot' too (fully described in *P. of M.* i (1921), p. 430 seqq.) becomes 'an object perhaps intended for a stump of a tree or a basket'.

¹ See above, p. 443 and Figs. 368, *a*, *b*.

² Tsountas, *Μυκῆναι*, Pl. V, 5 and p. 160, Fig. 154; Tsountas and Manatt, *Myc. Age*, p. 160, Fig. 54; P. et C., vi, p. 842, Fig. 426,

21, from drawing by St. Elme Gautier (enlarged above). The loin-clothing, knotted in front with two ends hanging down in Chaldaean fashion, is abnormal for a Minoan male figure. The beard may here be regarded as taken over from the Oriental prototype.

³ *Collection de Clerc, Cat.*, 41; Hayes Ward, *Seal-Cylinders of Western Asia*, p. 60, No. 141 *b*.

an ally or double, each struggling with a lion antithetically disposed,¹ and it is this version that we recognize in the gold signet-ring (Fig. 574) formerly in the Museum of Péronne.²

Of the scheme in which a hero or divinity stands between two opposed animals or monsters, several good examples have been given in which the Goddess herself or the young God forms the centre of the composition. These, like the kindred motives in which two similar forms confront a central object of a sacred character, such as a tree or a baetylic pillar or altar, begin to be of frequent occurrence in the mature stage of the First Late Minoan Period (L. M. I *b*) as is evidenced, for instance, by the fine intaglio from the Vapheio Tomb where the two Genii pour libations before a nursling palm.³ The 'Lions' Gate' scheme itself appears on Zakro seals of the transitional M. M. III *b*-L. M. I *a* epoch, and from L. M. I *b* onwards is of continual recurrence.

Frequency of
'Lions'
Gate'
scheme
from
L. M. I *b*.

Throughout the L. M. II Period these antithetic combinations are specially frequent in a religious connexion. The signet types found in association with the late shrine on the Central Court will at once occur to mind, with the Goddess on the peak between her lion supporters.⁴ Many such designs occurred too among the clay seal impressions from the latest deposits in other quarters of the Palace.⁵

An outgrowth of the Lions' Gate type is to be found in that in which two bodies have a single head. A variation of this is supplied by another fine sard lentoid, Fig. 575 (Suppl. Pl. LV, *f*). We have here a powerfully executed symmetrical group of a huge horned sheep (which except for the characteristic horns might well be a bull) attacked by a lion.⁶ The effect of the head with a body on either side, at first sight conveys the idea of one of the doubled-bodied figures elsewhere connected with versions of the Lions' Gate motive. Examples are given for comparison from Mycenae in Figs. 576, 577, a Kriosphinx with a ram's head facing, two lions' bodies and four wings,⁷ and a double-bodied lion in the same guise.⁸

Single-headed
'Lions'
Gate'
type, and
bizarre
variation.

¹ E.g. *Coll. de Clerc*, 48; Hayes Ward, *op. cit.*, p. 66, No. 164.

² P. et C., vi, p. 864, Fig. 430; drawing by St. Elme Gautier.

³ See above, pp. 453, 454, Fig. 378.

⁴ See below, p. 608, Fig. 597 A, *c*.

⁵ See *ib.*

⁶ J. D. Beazley, *The Leaves House Collection of Ancient Gems*, No. 2, p. 1 and Pl. I, 2.

⁷ See A.E., *Myc. Tree and Pillar Coll.*,

p. 61, Figs. 37, 38. Fig. 576 is a jasper lentoid from a chamber-tomb of Mycenae (Tsountas, *Éph. 'Apx.*, 1888, Pl. X, 30 and p. 178; P. et C., Fig. 428, 17; Furtwängler, *A.G.*, Pl. III, 24). The design is accompanied by the 'impaled triangle' symbol. See, too, P. et C., vi, p. 845, Fig. 428, 17.

⁸ A sard also from a Chamber Tomb; *Éph. 'Apx.*, 1888, Pl. X, 2; Furtw., *op. cit.*, Pl. III, 23; P. et C., vi, Pl. XVI, 20.

Here we seem to see a deliberate attempt to deceive the eye accustomed to such schemes, in fact an artist's trick of an extremely modern kind with the implied inquiry 'Where is the lion?'



FIG. 575. HORNED SHEEP ATTACKED BY LION: RESEMBLING DOUBLE-BODIED SCHEMES: SARD.



FIG. 576. KRIOSPHINX WITH RAM'S HEAD, DOUBLE BODY (WINGED LION). JASPER: MYCENAE.



FIG. 577. TWO-BODIED LION (LIONS' GATE SCHEME). SARD: MYCENAE.

Many of the later animal schemes such as the crossing animals, sometimes at grips with one another, also stand in direct relation to the traditional schemes of bulls and lions on Babylonian cylinders. The crossing figures of leaping bulls in Fig. 578 (Suppl. Pl. LV, *g*) supply a fine illustration of this. They even recall motives of a much more primitive Minoan class, such as the crossed hounds on an E. M. III three-sided bead-seal figured above,¹ which also suggest exotic influences.

A striking version of such more or less counter-balanced animal forms is that supplied by a lentoid of translucent sard, said to come from Mycenae,² on which two antithetically opposed lions fasten on a stag's throat (Fig. 579 and Suppl. Pl. LV, *d*). The complement to this scene is shown in Fig. 580 (Suppl. Pl. LV, *h*) where the lions quarrel over their prey. They are here seen symmetrically crossed, gripping each others backs while the stag in its death throes falls headlong between them.



FIG. 578. SARD LENTOID.

Lions
fighting
for prey.

¹ See above, p. 521, Fig. 464, 3.

² J. D. Beazley, *Lewis House Collection of Ancient Gems*, Pl. I, 1, and p. 1, No. 1. I am

indebted to Professor Beazley for a cast of this and of Fig. 575.

On another lentoid gem two lions are seen, one seated left, the other springing to the right, while in that reproduced in Suppl. Pl. LV, *h*, two bulls appear in reversed positions.¹



FIG. 579. TWO LIONS SEIZING STAG BY NECK. CORNELIAN LENTOID. (3)



FIG. 580. TWO LIONS FIGHTING FOR THE SLAUGHTERED STAG. CORNELIAN LENTOID. (3)

Designs adapted to Circular Field: the Lentoid Class.

The crossing or opposed animals and other antithetic figures, and the 'Lions' Gate' class of designs were themselves specially adapted for the lentoid form which from the closing phase of L. M. II onwards became practically the sole type of bead-seal. Equally so were such more or less parallel motives as a daemon combined with the foreparts of collared hounds or the linked foreparts of bulls, where the interspaces are filled with a horned sheep's head below and the shield and impaled triangle symbols above.

Adaptation of designs to circular field of lentoids.



FIG. 581. RAM'S AND GOAT'S HEADS ON HAEMATITE LENTOID FROM CENTRAL CRETE.

In Fig. 581 we see an ingenious example on a haematite lentoid from Central Crete where a facing ram's head and two goats' heads in profile are packed into the circular field.

As in the most primitive forms, the engraver was generally filled with

¹ In the Cabinet des Médailles, from a cast kindly supplied by Monsieur David.

² A. E. Coll.

a kind of *horror vacui* which made him seek to fill the entire surface of the seal. The artistic concentration visible in the Transitional M. M. III-L. M. I



FIG. 582. CAT AND DUCK.
CORNELIAN: ARKHANES.

epoch which led to the reservation of part of the field for the fuller emphasis of the design—so well illustrated by the horned sheep on the flat cylinder (Fig. 546 above)—was no longer maintained. A good illustration of this growing tendency has been already supplied by the comparison of the exquisite instantaneous sketch of the three water-birds in varying action¹ silhouetted against a plain background with the later group in which the rest of the field is filled in with papyrus sprays.² This later work, dating from about the beginning of L. M. III, itself contrasts

with a still further stage in the same 'lentoid' evolution in which the



FIG. 583. CONTORTED LION.
ROCK CRYSTAL: KNOSSOS.



FIG. 584. CONTORTED BULL
WITH GLOBULE IN CENTRE.



FIG. 585. GALLOPING BULL WITH
SHIELD BELOW: RED JASPER.

kindred Nilotic theme of the Cat and Duck is reduced to the closely packed form shown in Fig. 582.

Coiled
and con-
torted
animal
figures.

Figures of animals coiled or contorted so as to fit the circular field are now of constant repetition. The lion of the crystal lentoid from near Knossos (Fig. 583) is itself of exceptionally fine work, and the pottery found with it established the date, in this case, as mature L. M. II. The bull of Fig. 584, coiled round a central globule, recalls the lion. Fig. 583. In the latter case, the Vapheio relief of the great beast caught in the net may help to explain the attitude. So, too, the twisted body of the wild-goat, Suppl. Pl. LV, /, is itself of very early tradition in the history of Cretan seal-

¹ See p. 492, Fig. 426.

² See *Ib.*, Fig. 427.

engraving. The galloping bull of Fig. 585 with a Minoan shield below is also very cleverly executed to fit the circle.

Lions pursue one another round their narrow orbit: in one case, at least,

Acrobatic
Minotaur
figures.



FIG. 586. MAN-LION PURSUING MAN-BULL: CORNELIAN.



FIG. 587. MINOTAUR WITH SACRAL SYMBOLS.

a man-lion seems to be after a man-bull (Fig 586). The Minotaur scheme itself, as has been shown above, fits on to a design of an acrobatic figure of early Nilotic origin.¹ It was of its nature specially well adapted for the circular field of the lentoid type, and the frequent occurrence of these semi-human and semi-animal types on Late Minoan bead-seals is partly explained by this fact. The man-bull displayed by the specimen of Spartan basalt from the Psychro Cave (Fig. 587) derives particular interest from the occurrence in the interspaces of the field of two symbols, the impaled triangle and the Minoan 8-shaped shield that are known to have a religious value. A stellar symbol appears beneath a Minotaur on a somewhat earlier lentoid of black steatite from the Knossos district.²

In the above cases there is perceptible a deliberate effort to fill the circular space of this class of bead-seal, and at the same time to adapt to it the arrangement of the principal figure or figures of the design. This effort, as is well shown by the galloping bull of Fig. 585 (Suppl. Pl. LV, *k*), is itself compatible with a free and beautiful effect. A similar result is achieved in the design of the two lions in reversed positions—one seated, one leaping—on the lentoid (Fig. 588).³ Even where the symmetrical balance is patently artificial, as in the case of the two lions fighting for the stag in Fig. 580 (Suppl. Pl. LV, *h*), the result at times is still a noble achievement. To harmonize the design with the field available is in itself a laudable aim,

Evolution
of 'lentoid
style'.

¹ See above, p. 505, Fig. 449, and the Comparative Table, Fig. 448.

² *P. of M.*, i, p. 359 and Fig. 260, *d*.

³ At the end of the section.

whatever the form of the seal. But to subordinate the design to the field marks a decline in true artistic spirit. The reserve shown by leaving parts of the background free so as throw into relief the principal theme of the engraving—finely illustrated by the waterfowl group above referred to¹—itself answers to a higher aesthetic standard. The filling-in methods that we have to deal with in the fully developed 'lentoid' style really represent a return to the more primitive usage, such as is illustrated by the steatite prism seals of Early Minoan date.

From the clay seal impressions of the late palatial deposits at Knossos, described in the succeeding Section, it will be seen that the fully developed 'lentoid' style was in general vogue by the close of L. M. II.

¹ See p. 492, Fig. 426, and Suppl. Pl. LIV, *m*.



FIG. 588. CORNELIAN LENTOID.

§ 108. THE LATE PALATIAL DEPOSITS OF CLAY SEAL IMPRESSIONS
AT KNOSSOS.

Long indigenous tradition of Minoan seal-types; Deposits of clay seal impressions belonging to Great Transitional Age of intaglio work—M. M. III—L. M. I a; Late Palatial hoards associated with tablets of Class B; Inferior quality of clay and baking; Mostly preserved, with documents, in upper-floor rooms; Sealings broken and scattered by precipitation; S.W. Basement Deposit (A)—the clay 'matrix' and its wide distribution; Lapidary's workshop of L. M. III date; Hoard from Central Shrine (B); The 'Archives Deposit' (C)—chronological conclusions; Deposit derived from East Hall borders (D); Deposit E from Little Palace; Intrusive seal impression with wrestling bout; Parallel of thrown champion in steatite relief—M. M. III date; Isolated finds, with tablets; Summary catalogue of late Palatial seal impressions from various Deposits; Impressions of gold signet-rings and others with Religious subjects; Illustrations of Central Palace Cult; Frequency of Lions' Gate scheme—divine presence variously indicated; Fragmentary seal impression showing sculptural group of Lions' Gate type on Cornice of Portico; Origins of guardian lion types on Minoan seals—connected with portals of shrines; Double Axes decoratively grouped—suggestion of ceiling pattern; Predominance of lentoid bead-seals, large examples; Frequency of bucolic motives; Typical lentoid designs; Chariots and horses; Graffito signs of Class B as signatures and counter-marks on seal impressions; Arrow-sign mark of Armoury Deposit; Countermarked sealings of West Magazines.

IN the summary review of Minoan seal-engravings given above, something has been done to trace the long indigenous tradition of the Art, starting with the effort of a primitive Society to supply its domestic needs, quickened by the knowledge of foreign models from more than one source and ultimately leading up to miniature masterpieces of the native genius, such as in the case of animal representations, at any rate, have hardly been surpassed.

Long indigenous tradition of Minoan seal-types.

Of the great Age of Minoan intaglio work—the grand Transitional period that includes the latter part of M. M. III and the earlier phase of of L. M. I—a definite landmark has been preserved by the successive discoveries of large deposits of clay seal impressions, in an important house of Zakro, in a room of the little Palace of Hagia Triada, and at Knossos in the Temple Repositories.

Earlier deposits of clay seal impressions M. M. III—L. M. I a.

Late
palatial
hoards—
associa-
ted with
tablets of
Class B.

The intermediate sphragistic phrase answering to the L. M. I *b* epoch is partly supplied by the contents of certain tombs, notably that of Vapheio. For evidence parallel with the above, afforded by clay sealings formerly attached to documents, we have, however, with some individual exceptions, to pass on to the large though scattered deposits of such objects—many fragmentary—belonging to the last palatial phase of Knossos. With these, too, must be grouped the clay seal impressions, more sparsely found in actual association with the hoards of inscribed tablets of the then prevalent Linear Class B, and in some cases countermarked with signs of that form of the script.¹

Inferior
quality of
clay and
bakings.

From the outset, however, it is necessary to understand a difficulty which besets this class of material in its later phase. In the case of the large hoards of sealings, above referred to, from Zakro, Hagia Triada, and Knossos itself, the clay nodules presenting the impressions were well baked, as the result of some special method of treatment. In this they are paralleled by the clay documents of the Linear Class A with which they were contemporary. But, at the later epoch to which both the tablets of Class B and the associated clay seal impressions belong, the process was of a more summary kind, and in both cases it would appear that they were little more than sun-dried. The hoards of inscribed clay tablets, indeed, could hardly have been preserved except for the supplementary heating due to the conflagration of a large part of the building. In more than one case—though great precautions were taken when once the danger was ascertained—a torrential storm of rain at the moment of excavation reduced both tablets and clay sealings to pulp. Fire—so fatal to other archives—was, at Knossos, an actual cause of preservation.

The clay itself, made use of for both documents and sealings of the earlier class, had been of finer quality and better prepared. Thus the artistic details of the intaglios themselves were better reproduced than was often possible in the case of the rougher and less carefully prepared clay used in the later period.

Most
preserved
with docu-
ments in
Upper
floor
rooms.

The less durable quality of the material was so far recognized by the Palace officials themselves that, whereas in the days of the 'Middle Palace', at Knossos and elsewhere, hoards of sealings were actually found in basement repositories, according to the later arrangement these, like the documents to which they had been originally attached, seem to have been in nearly all cases preserved in upper-floor rooms.² It is possible, indeed, that

¹ See below, pp. 616, 617.

² The clay chest containing tablets found near the border of the Southern Terrace of the West Palace section lay, however, on the

one cause of this was the use of materials more perishable than parchment—such as papyrus imported from Egypt—for the documents themselves. A fragment of a clay seal impression from a late Syro-Hittite cylinder, derived from the 'Room of the Archives' may, in fact, be taken to show that foreign correspondence on such materials was there preserved.

This upstairs storage resulted in another disadvantage as regards the preservation of the later hoards of sealings. None of these were found in the circumscribed space represented by the cist or coffer that had once contained them. They had all been precipitated from their original place of deposit. This precipitation, which naturally led to their being scattered over a comparatively large basement area, was productive of specially damaging effects in the case of such easily friable objects as these imperfectly baked sealings. Compared with the impressed nodules of the earlier class, this later material largely consisted in scattered fragments. Indeed, the proportion of perfect seal impressions was very small.

Sealings
broken
and
scattered
by precipi-
tation.

The opening of letters or other documents written on such materials as parchment or papyrus naturally accounts for a large amount of the breakage. Over and above this, moreover, the breakage due to the original precipitation had in the basement areas been greatly increased owing to disturbance caused by the often renewed grubbing of later treasure hunters. The collection of the scattered fragments—themselves earth-coloured—was itself a difficult and often thankless task, and it was only made possible by carefully sifting all the earth from areas where these or other fragments of possible importance occurred. Many valuable discoveries were, however, due to the methodical use of sieves adopted from the beginning of the excavation and for which four sieves, each with two men, were often employed.

Deposits of Seal Impressions in S.W. Basement.

Two deposits of clay seal impressions belonging to the later period of the Palace have already been partly described.

One of these—as usual consisting largely of broken specimens—which may be here referred to as Deposit A, was brought to light in two basement spaces in the South-West Palace region, extending on each side of a

ground floor—though of an upper terrace level—and the 'Chariot Tablets' belonged to a small closet opening off a basement chamber where the remains of the small wooden chests that had contained them were

also found. It was here that a clay seal impression representing a chariot and horses with the two riders was decomposed by a torrential storm which was also fatal to some of the tablets. See *Scripta Minoa*, i, p. 43.

S. W.
Basement
Deposit
(A): the
clay
matrix
and its
wide
reproduc-
tion.

section represented above by the 'South-North Corridor'.¹ In the basement East of the Corridor, a little below the level where remains of L. M. II inscribed tablets lay, was found the 'clay matrix', evidently taken from a large signet-ring in precious metal, impressions from which occurred in other parts of the Palace. The offertory scene on this, in which a female votary offers a two-handled chalice to the seated Goddess, has been illustrated and discussed above² and the style as well as the recurrence of a similar type on a Zakro sealing,³ clearly carries back the original design to Transitional M. M. III-L. M. I *a* epoch. That its use survived down to a later epoch is proved, however, from the occurrence of several broken impressions of it in the 'Archives Deposit' (C) in a medium dated to L. M. I *b*-L. M. II. As these were of the ordinary business character, it would seem, moreover, that the clay matrix itself was not a counterfeit device with a fraudulent intent, but rather a survival due to the wish to adhere to an old religious type, at a time, perhaps, when the original had been lost in the great catastrophe at the end of M. M. III.

There are some reasons for referring the 'Young Minotaur' seals, also belonging to this deposit,⁴ to the L. M. I *b* Period as well as the finely engraved signet impression showing a youth holding cords attached to two seated hounds, antithetically posed.⁵ But the bulk of the impressions here found—including the lady with the swallows (Fig. 597 B, i)⁶—were products of the closing palatial Age. A *terminus a quo* for this deposit is supplied by the 'Palanquin Fresco' with which it was associated.⁷ There is every reason to suppose that the seal impressions here found, many of them bearing designs of a religious character, had stood in relation to a small shrine that opened off the West side of the corridor above and to which the 'Palanquin Fresco' itself seems to have belonged.

Lapidary's Workshop of Re-occupation Date.

Lapi-
dary's
workshop
of
L. M. III
date.

It is worth noticing that in another small basement immediately South-West of the area, containing the remains of the above Deposit, were found evidences of its use as a lapidary's workshop in the Re-occupation Period. Here, besides a great variety of peg-like objects in white 'marble' and steatite studs of the same material and shell-beads—some unfinished—a

¹ See *P. of M.*, ii, Pt. II, p. 762 seqq.

² *P.*, 395, and Fig. 331.

³ *Ib.*, p. 768, Fig. 499.

⁴ *Ib.*, p. 763, Fig. 491.

⁵ *Ib.*, p. 765, Fig. 495.

⁶ *Ib.*, p. 766, Fig. 497.

⁷ *Ib.*, p. 770 seqq., and cf. above p. 214.

worked oblong piece of jasper and other materials for use, there came to light evidences of the actual manufacture of lentoid bead-seals. Two of these are here illustrated in Fig. 589 *a* and *b*, and show steatite beads as first roughed out, *a* with an incipient boring at one end, *b* wholly unbored. The actual engraving of the design was in these cases clearly left to the finishing stage. In Fig. 590 *a-d*, however, we encounter a different method, the intaglio—a cow suckling a calf—having been cut on a roughly rounded grey steatite core (*b*)—sawn off below (*c*)—the cutting out and drilling of the bead itself being left to the final stage (*a, d*). With the remains of the unfinished bead-seals there also lay clay nodules which had been used for trial pieces by the engraver during the course of his work and showed parts of very late animal designs.¹

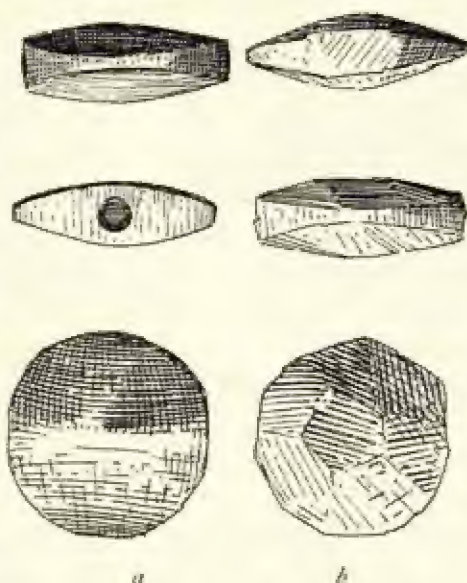


FIG. 589. LENTOID BEAD-SEALS IN PROCESS OF MANUFACTURE.

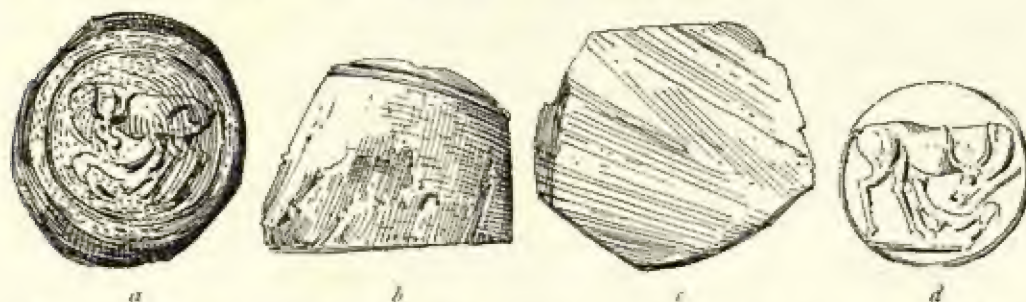


FIG. 590. SEALSTONE IN PROCESS OF MANUFACTURE: 'LAPIDARY'S WORKSHOP', L. M. III. *a*, TOP OF PIECE OF GREY-GREEN STEATITE SHOWING INTAGLIO; *b*, SIDE VIEW OF PIECE; *c*, BASE; *d*, SKETCH OF SEAL-TYPE.

¹ Among these was a fragment of a scene showing a dog seizing his quarry, others of couchant oxen, goats, and horned sheep, and a section of a conventional palm-tree. In an adjoining corner stood a pot full of small

carbonized beans of a kind still imported from Alexandria in the Candia market. Evidently the L. M. III lapidary had made his home in this outer basement.

Deposit of Broken Sealings in Central Shrine.

Hoard
from
Central
Shrine
(B).

A religious connexion, even more direct than that inferred in the case of Deposit A, could be established for a hoard of fragmentary clay seal impressions, here referred to as B, found within the North Columnar Wing of the little shrine on the West side of the Central Court.¹ The signet-types consisted of not more than two or three varieties, all illustrating the cult of the Minoan Rhea and clearly referring to a single sanctuary (see Fig. 597 A, c). The Goddess is imaged as standing on a peak between her guardian lions and beside a sanctuary building, in which we may reasonably recognize that actually brought to light on the rocky crest of Mount Juktas.²

In this case, the broken sealings, instead of being scattered over a considerable space, were found, approximately at the same level, just above the floor, in the narrow space enclosed by the North wing of the Portico, and the evidence, therefore, weighs against their having been broken by falling from an upper repository. The breakage in this case may well have been due to the opening of documents secured by them. It looks as if the priestly superintendent of the sanctuary on the peak had been in regular correspondence with his colleague of the Central Palace Shrine.

The 'Archives Deposit'. C.

The
'Archives
Deposit'
(C).

A more extensive series of seal impressions (C) stands in connexion with what, in its final palatial form, has been called the 'Room of the Archives', in the Domestic Quarter. The 'Ivory Deposit' and other precious relics found in the spaces immediately below had stood in relation to this room under its earlier aspect as the 'East Treasury'.³ In an upper layer of the floor of the same basement chamber—familiarily called the 'Lair'—and in the adjoining spaces above this more precious deposit was a stratum containing more or less fragmentary sealings, together with a few tablets of Class B, which had evidently reached their present position owing to the collapse of the floor of the room above. On its Eastern

¹ *P. of M.*, ii, Pl. II, pp. 808, 809. The scene, as shown in Fig. 597 A, c, below, was put together by me by means of overlapping pieces of several fragmentary specimens, and the whole was subsequently drawn by Monsieur E. Gilliéron, père. When, after the

Revolution, an independent Government came into power, the Knossian signet-type thus pieced together was adopted for a new postage stamp.

² *Ib.*, i, p. 154 seqq.

³ See *ibid.*, iii, p. 399 seqq.

border, again, the same catastrophe had precipitated other relics of the same kind into the space overlying the balustrade of the 'Queen's Bath-Room' on that side.



FIG. 591 *a, b, c.* SUCCESSIVE SIDES OF NODULE IMPRESSED WITH 'CLAY MATRIX': *b* SHOWS WHERE STRING FOR ATTACHMENT PASSED; *c*, APPARENTLY PRESSED ON WICKER-WORK. ($1\frac{1}{2}$)

Other similar remains were found, beyond the neighbouring Service Staircase, embedded in the debris that filled the lower part of the Hall of the Colonnades on its Southern side. Their occurrence here, indeed, has a special interest since this group of seal impressions was associated with the largest of all the inscribed tablets found in the Palace—a document of 24 lines including three lists of men and women.¹ Here, too, were found, together with other remains of tablets, two or three disks of clay, larger than the ordinary sealings, which had evidently been used to secure packages.² They were traversed internally by sections of the carbonized string with which the package had been tied up and, in this case, in place of seal impressions, bore graffito inscriptions in the Linear Class B, with numbers attached = 30.

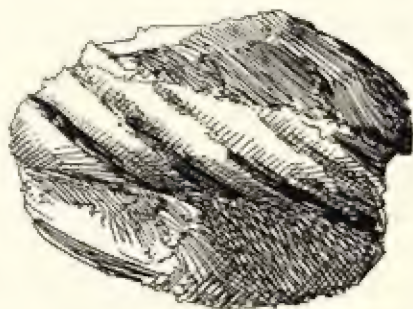


FIG. 592. INTERIOR OF BROKEN NODULE SHOWING IMPRESS OF COARSE CORD. THE UPPER FACE OF THIS BORE IMPRESSION OF COLLARED HOUND, FIG. 597 B, *f*. ($1\frac{1}{2}$)

It is of interest to observe that the impressions of the 'clay matrix' here reproduced in Fig. 591 *a*, several specimens of which occurred here, as in Deposit A,³ seemed to have been overlaid on wicker-work. Nodules stamped with the widely diffused collared hound motive (Fig. 597 B, *f*) showed within them the impress of coarse cord (Fig. 592), closely resembling that

¹ See below, p. 703, and Fig. 686.

² As they were found within a small radius of one another and the inscription and numbers were in each case identical, it seems

probable that they belonged to a single package.

³ See above, p. 395, Fig. 331.

of the inscribed clay disks. Two sealings, here found presenting a symmetrical group of barley-corns (Fig. 613, p. 626 below) were impressed below in a rib-like manner suggestive of having been applied to some kind of basket work.

Another considerable group of sealings, forming an integral part of the same Deposit, had, at the same time, been precipitated into the small lobby below the South-West corner of the 'Archives' Room, which, from the occurrence of numerous specimens depicting a Minoan Genius,¹ was known at the time as the 'Room of the Daemon Seals'. This lobby seems to represent a short section of what had originally been a corridor, the continuation of which in a westerly direction was cut short by the reconstruction of this part of the building at the beginning of M. M. III.²

The fragmentary impression from this Deposit, Fig. 593, clearly belongs to a Syro-Hittite cylinder. Part of a long-robed personage stands on the left, holding a kid, while half of a probably composite male figure is seen in front, whose left leg is in the coils of an uncertain object. Beyond is another long-robed figure. The source of the cylinder can be approximately located. The triple beading running up the long robe of the personage to the left recurs in the case of a worshipper on



FIG. 593. FRAGMENTARY IMPRESSION OF SYRO-HITTITE CYLINDER.

a Syro-Hittite cylinder³ who also holds an animal. The worshipper is there coupled with a winged figure with a human body, showing a long flounced skirt, but terminating above in two horned animals' heads.⁴

The approximate date of the actual deposit of this series and the other analogous more or less scattered hoards of clay seal impressions is in all cases the same, being supplied by that of the final catastrophe of the Palace to which their precipitation was due. On the whole, therefore, they represent the signet-types in use at the close of L. M. II or round about 1400 B.C. It seems reasonable to infer that the majority of the sealings belonged to the epoch immediately preceding that historic landmark. On the other hand, if we consider the medium in which they were discovered and the space of time during which the 'Room of the Archives' fulfilled

¹ See above, p. 441.

² The course of the built stone drain that here runs about half a metre beneath the existing pavement was cut short at the same point by the Southern wall of the 'Hall of the

Colonnades' as then arranged.

³ Schlumberger Collection; Ward, *Seal Cylinders of Eastern Asia*, p. 304, no. 953.

⁴ Compare the two-headed forms shown in Part i, above pp. 374, 375.

its later function, individual specimens might have a chronological range going back to the close of the L. M. I *a* epoch, when, as shown above, the Domestic Quarter of the Palace underwent a considerable restoration accompanied by partial remodelling. In other words, there is no difficulty in supposing that some of the clay sealings may belong to the L. M. I *b* Period. Nor must it be forgotten that the signets themselves that had impressed the clay nodules might in certain cases have been considerably older than the impressions preserved.

This scattered 'Archives Deposit' is here referred to as C.

Closely bordering the Northern offshoots of this Deposit is another—D—also of a much dispersed character. The remains of this occurred in the Southern section of the passage connected with the Royal Magazines and beyond its blocked entrance on the landing of the Grand Staircase. It continued thence for some metres in a stratum, superposed on the Middle East–West Corridor, which was associated with a considerable hoard of inscribed clay tablets. It seems clear that this Deposit of seal impressions had been precipitated from one or more store-rooms or offices bordering the great 'East Hall' ¹ above.

Series D, which was much smaller than the preceding, may thus be referred to as belonging to the 'East-Hall Borders' Deposit.

Deposit
D,
derived
from
E. Hall
borders.

Deposit E: from Little Palace.

Parallel with these groups of sealings belonging to the last Age of the Palace itself, and precipitated by the same final catastrophe, is a large scattered deposit, E, found within and on the borders of the Central Shrine of the 'Little Palace',² later the scene of a primitive religious revival illustrated by the cult of fetish blocks.³ But several of the fragmentary impressions here brought to light illustrate a cult identical with that represented by the signet-types from the Central Shrine of the Palace itself. In this case, too, we see adorants beside columnar sanctuaries and lion guardians, heraldically grouped on either side of a rocky peak.

Deposit
E, from
Little
Palace.

Like the preceding, this 'Little Palace Deposit' bears every evidence of having being derived from an upper repository. Its scattered remains,

¹ See *P. of M.*, iii, p. 481 seqq., § 88.

given in Figs. 326 and 327. (Reproduced below, p. 608, Fig. 597 A, *i, j*.)

² The deposit is referred to in *P. of M.*, ii, Pt. II, pp. 523, 524, where two impressions representing parts of sanctuary scenes are

³ See *P. of M.*, ii, Pt. I, p. 346, Fig. 198.

indeed, though separated by the North and East walls of the Shrine itself into three main sections, were otherwise continuous and can be treated as one whole. The impressions were found near the floor-levels in the lower part of the accumulated debris. It will be seen from the analysis supplied below¹ that in addition to the religious scenes the material covers a great variety of subjects. With the sealings was a clay seal—whether counterfeit or not—in the form of a cone presenting a sunken device of an ox with his head turned back showing two sprays below, and another, reversed, in front.

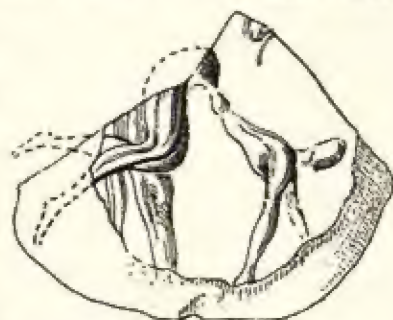


FIG. 594. SEAL IMPRESSION SHOWING OVERTHROWN CHAMPION, FROM LITTLE PALACE (M. M. III). (2)

Intrusive M. M. III Seal Impression with Pugilistic Scene and Parallel Relief from Steatite Vessel.

Intrusive
M. M.
III seal
impression
showing
pugilistic
scene.

One interesting seal impression, however, from the same area (Fig. 594) clearly belongs to the earlier class represented in the Little Palace itself by the signet presenting a head of a chaunting 'dervish'.² Imperfect and somewhat distorted as the sealing is, the subject—a pugilist thrown by a fellow champion—belongs to an agonistic class which seems entirely to have lost its vogue by the close of M. M. III. Curiously enough, the best illustration of the episode itself has only recently been supplied by a discovery of an object of contemporary date made on terrace of the slope immediately to the back of the Little Palace, known from the abundance of ancient relics found there as *στὰ Ἑλληνικά*—the 'heathen' ground. This is a fragment of a grey steatite vessel, probably a 'rhyton', with a highly spirited relief (Fig. 595), in which the winner of the bout throws his adversary—who seems to have leaped upon him—backwards by a powerful upper cut. In this case, as in several examples known on 'signets' and 'rhytons', the defeated champion would have fallen on his back.



FIG. 595. FRAGMENT OF STEATITE VESSEL (PROBABLY 'RHYTON'), FROM STĀ HELLENIKĀ, KNOSSOS. (1)

Paralleled by
steatite
relief.

¹ P. 605 seqq.

² P. 489, Fig. 419 *bis* above; found underneath a step of the main staircase.

In both representations we are carried back to a very different style of Art, the forceful, natural spirit of which is rarely visible in the intaglio designs of the last Palatial Age, as we see them reflected in the clay impressions of Figs. 597 A, B. Certain illustrations of bull-grappling scenes—such as Fig. 604 below—are still inspired, however, with something of the old tradition.

Isolated Sealings found with Clay Tablets of the Linear Class B.

Besides smaller groups of sealings, such as, for instance, occurred in the Jewel Fresco Area, still more isolated specimens were found in connexion with various hoards of clay tablets of the Linear Class B, some of these themselves a good deal scattered.

Isolated
finds with
tablets.

These clay impressions, nevertheless, supply an inseparable pendant to those of the Deposits above described. All these Deposits—with the exception of the Series C from the Central Shrine—were, as already pointed out, themselves associated with remains of similar clay tablets, and, together with the isolated impressions not included in them, had been derived from upper store-rooms or offices. The precipitation of both classes of remains was, moreover, due to the same historic cause, the final catastrophe of the building.

SUMMARY CATALOGUE OF LATE PALATIAL SEAL IMPRESSIONS IN VARIOUS DEPOSITS.

A. SOUTH-WEST BASEMENT DEPOSIT.

1. Clay matrix of signet-ring. (See p. 395, Fig. 331 above, and *P. of M.*, ii, Pt. II, p. 767, Fig. 498.)
2. The 'Young Minotaur' (2 specimens). (*Ib.*, p. 763, Fig. 491.)
3. Minoan Genius holding ewer, spray behind.
4. Female figure luring swallow with another attached to a string. (Fig. 597 n, i). (Repeated from *Ib.*, p. 766, Fig. 497.)
5. Youth holding cord attached to two seated mastiffs. (*Ib.*, p. 765, Fig. 495.)
6. Collared bitch. (Fig. 597 n, j.) (Numerous fragments, apparently from 'flat cylinder'.) See, too, 'Archives Deposit', No. 38, and *P. of M.*, ii, Pt. II, p. 765, Fig. 493, and p. 581, above, Fig. 567.
7. Crouched lion, from abraded lentoid, apparently the same as that used for 'Armoury'.
8. Horned sheep and stag, with shield and 'impaled triangle': lentoid impression. (See above, p. 570, Fig. 544, c.)
9. Long-horned sheep, couchant—'elongated head' type.
10. Couchant oxen, heads in opposite directions. (See above p. 566, Figs. 539, 540, &c.)

11. Man leaning on fence surveying bull. (See above p. 564, Fig. 532, 'At the Cattle-show'.)
12. Fugitive *Agrimi*.
13. Half of large clay impression showing water-fowl, and reeds restored in Fig. 597 *b, c*. (Compare the sealing found near Arsenal, p. 615, Fig. 602 below, with papyrus added).
14. Dolphins swimming round octopus (earlier date).
- 15, &c. Numerous fragments of hunting scenes, cattle-pieces, &c.

B. CENTRAL SHRINE DEPOSIT.

(See *P. of M.*, ii, Pt. II, p. 809, Fig. 528.)

1. Restored impression of signet-ring. Goddess on peak with lion supporters: Shrine to left (Fig. 597 *A, c*).
2. Variant of same.

C. 'ARCHIVES DEPOSIT'.


1. Impressions of counterfeit matrix of signet: as A 1. (Several specimens.)
2. Male adorant before richly clad figure of Goddess who raises both arms. (Impression of signet-ring, a good deal defaced (Fig. 596).
3. Man saluting figure with 8-shaped body shield: good style, but fragmentary.
4. Three warriors with body shield. (*P. of M.*, iii, p. 313, Fig. 205.)
5. Three Minoan body shields and part of countermark, .
6. Three similar body shields connected by spiral frieze (as Shield Fresco). Much broken. (See *P. of M.*, iii, *loc. cit.*)
7. Goddess standing right, raising her hands to lower jaws of guardian lions. (Fig. 597 *A, c*.)
8. Variant of same. (Fig. 597 *A, a*.)
9. Female adorant with upraised hand; spray to left.
10. Part of impression of 'flat cylinder' showing four female adorants with one hand upraised. (Fig. 597 *A, b*.)
11. Three large 'sacral knots' between body shields, spiral frieze below. (Fig. 597 *A, d*.)
12. Two 'sacral knots' antithetically set on each side of a palm-tree. (Amygdaloid type.)



FIG. 596. SKETCH OF SEALING, C. 2. MALE ADORANT BEFORE GODDESS: MUCH ABRADED. PROBABLY FROM GOLD SIGNET-RING. (?)

13. Minoan Genius with man-lion and animal's leg. (Remains of 18 specimens; from 'Area of Daemon Seals'. See p. 626 and Fig. 614).
14. Man and altar, fragmentary.
15. Griffins, back to back, antithetically posed, with heads turned towards each other. Between their wings crested bird with long tail. (Fig. 597 A, L.)
16. Griffins confronted.
17. Single Griffin (3). Lentoid.
18. Pillar, horizontally placed above two animals in reversed positions.
19. Fore-arm and hand holding sacred lily spray. (Fig. 597 A, f.)
20. Part of shrine with sacral horns.
21. Group of four double axes, symmetrically arranged. (Fig. 597 A, d.) Compare restored ceiling pattern. See p. 614, below, and Fig. 601.
22. Legs, apparently of man-bull, with star below.
23. Human legs, combined with foreparts of two wild-goats.
24. Lion and fluted column.
25. Lion seizing bull by neck, from above.
26. Two lions confronted, in half-crouched positions, with bull's head between their heads.
27. Lion in contorted position: 'lentoid' class. Good style.
28. Variant type of same.
29. Lion standing, looking backwards.
30. Group of lions.
31. Lion springing on deer and gripping its neck: naturalistic foliage. (Several.)
32. Contorted lion with facing head.
33. Two lions seated, looking in opposite directions. (Several.)
34. Forepart of lion, facing, seizing animal's back. (Several.)
35. Lion springing on bull.
36. Boar to right, with tree behind.
37. Boar walking right.
38. Collared bitch: Fig. 597 B, f (as Deposit A).
39. Dog, with spray below.
40. Head of horned sheep, surrounded by spray and superposed on a cross-barred object. (Fig. 597 B, h.)
41. Two oxen walking in opposite directions, one with head lowered; behind each a palm-tree and small shoot between. (Fig. 597 B, m.) Perhaps from gold bead of 'elongated oval' type.
42. Fragment from scene of *taurokathapsia*. (Fig. 597 B, n.)
43. Youth grappling bull's horn. (Fig. 597 B, k.)
44. Bull looking back, and spray.
45. Bull looking back; youthful figure to right endeavouring to lead him by a cord that passes across his upper arm. Countermarked apparently by variant of Φ sign. See p. 564, Fig. 533.
46. Boy milking cow. (See p. 564, Fig. 534.)
47. Ox seated beneath conventional palm-tree.
48. Part of contorted figure of bull, with shield, and apparently sacral knot in field.
49. Bull with head lowered.
50. Bull's head between two calves (?), antithetically grouped. (Lentoid.) (Fig. 597 B, g.)
51. Two pairs of antithetically grouped oxen. (Lentoid.) (Fig. 597 B, c.)


52. Cow and suckling calf: usual type. (6 specimens.)
53. Bull coursing, fish below. (Lentoid).
54. Bull standing right and looking back; branch of tree above his hind-quarters.
55. Horned sheep, tied to spirally fluted column (*P. of M.*, iii, p. 317, Fig. 209, and cf. Fig. 208).
56. *Agrimis* with trees and foliage. (Numerous varieties.)
57. Two *Agrimis* standing in reversed positions.
58. *Agrimi* and dog running, and part of another animal.
59. Dog springing on stag and seizing it by neck. (As Fig. 471, p. 524.)
60. Horse (?) with two horses' heads and necks above. See below, p. 828, Fig. 809.
61. Fragment showing part of shield and whorl-shell.
62. Flying-fish.
63. Part of school of dolphins. (Earlier fabric.)
64. Horn-shaped object, like cornucopiae, with flowered mouth.
65. Grains of barley. (Several.) See p. 626.
66. Variant of the same.
67. Geometrical decoration of circles concentrically arranged, with central dot. (Several.)
68. Fragment of clay sealing impressed by Syro-Hittite cylinder. (See p. 598, Fig. 593.)

D. 'EAST HALL BORDERS DEPOSIT'.

1. Several impressions from the clay matrix representing the seated Goddess. (As A. 1 and B. 1.)
2. Goddess holding necks of two lions (one restored in Fig. 597 A, c), who stand back to back with their heads turned towards her.
3. Goddess, seated on folding-seat, reaching forward to receive food from attendant. (See above, p. 389, Fig. 322.)
4. Male figure—probably young God or Minoan Heraklēs—his hands placed on two lions heraldically grouped.
5. Young God laying his outstretched arms over heads of two heraldically confronted lions. (Cf. Kydonia gem, p. 467, Fig. 391, *bis*.)
6. Horned sheep before spirally fluted column: Minoan shield in field. (See *P. of M.*, iii, p. 317, Fig. 208, and cf. Fig. 209 from 'Chieftain's Grave'; similar from Gortyna.)
7. Forepart of Griffin.
8. Stag and two sacral knots. (Fig. 597 B, l.) See p. 577, Fig. 562.
9. Recumbent ox to left with head turned away from the spectator.
10. Recumbent ox with part of another behind.
11. Two couchant oxen in reversed positions. (Several examples.)
12. Two oxen symmetrically arranged in 'coiled' positions: good example of 'lentoid' style.
13. Cow and calf, usual type. (Fig. 597 B, d.)
14. Forepart of uncertain animal.
15. Lion leaping on bull.
16. Lion in contracted position. (Cf. p. 588, Fig. 583.)
17. Bull in contracted position with head turned towards hind-legs.
18. Upper part of palm-tree.
19. Sacred tree of papyrus-like appearance, between two wild-goats. Oval: perhaps from gold ring.

20. Wild-goat in contracted position with head turned towards hind-legs.
21. Horned sheep and wild-goat symmetrically arranged: Minoan shield and impaled triangle between. (Same as S.W. Basement Deposit.)
22. Three horned sheep, couchant (Fig. 597 B, *f*).
23. Two antithetically arranged animals (? dogs) with 'impaled triangle' symbol between.
24. Part of what seems to have been a design of two conjoined birds.
25. Flying bird.

E. 'LITTLE PALACE' DEPOSIT.

1. Adoring male votary before two-winged Minoan shrine with bi-columnar central structure. (Fig. 597 A, *j*. Cf. *P. of M.*, ii, Pt. II, p. 524, Fig. 326.)
2. Cornice, supported on columns on which is the design of two confronted lions, their forefeet resting on a rocky knoll, like that on which the Goddess stands in the signet impressions from the Central Palace Shrine. (Fig. 597 A, *i*, and cf. *P. of M.*, ii, Pt. II, p. 524, Fig. 327.) Restored with facing head: see p. 611, below.
3. Half-seated figure, apparently of Goddess, stretching out her arms towards the leg of a reversed animal figure.
4. Two doves seated on altar-block with incurved sides.
5. Griffin with expanded wings, and crested boar.
6. Griffin coursing right.
7. Female adorant before two foreparts of horned sheep.
8. Two collared dogs in opposed positions, with heads turned back and forefeet resting on altar-block with incurved sides. Between the dogs' heads a star, and 5 globules on either side of the field above. (Fig. 597 A, *g*.) Several examples.
9. Lower part of Minoan Genius standing before a large bull's head.
10. Genius with raised fore-paw standing before a large representation of a barley-corn. (See below, p. 626, Fig. 614 *k*.)
11. Facing head with two barley-corns in field. (Half a clay impression from an almost identical seal with a single barley-corn and the additional feature of a back part of a lion's body below, was found in the 10th West Magazine: Cf. below, p. 626, Fig. 613).
12. Apparently a grain of corn germinating. (See p. 626, Fig. 615.)
13. Three serpents with an object above like a cauldron upside down. (See above, Pt. i, p. 151, Fig. 116.)
14. Part of man-bull in contorted position.
15. Forepart of ox to right with linear sign  in front.
16. Part of one-masted ship, with rowers and horse, like those of chariots, superposed (See below, § 114.)
17. Man's leg and spray.
18. Human arm, spray, and waved line.
19. Man standing in front of large head of couchant ox, hind-quarters of lion behind him, apparently gripping the neck of another kneeling ox. (Fig. 597 B, *h*.)
20. Fragment of hunting scene: dog seizing neck of quarry.
21. Horned sheep with head turned back against body. Good style.
22. Man leaping on forepart of bull: in field *r.*, sacral knot and shield.
23. Many other fragments of scenes relating to *Taurokathapsia*.
24. Two lions in reversed positions: branch between.

25. Couchant lion wearing collar: head turned back.
26. Couchant lion, head turned back: spray (tree) behind.
27. Lion springing on stag's head.
28. Ox with back of head turned away, and wild-goat.
29. Three wild-goats apparently coursing, with heads turned back, symmetrically grouped to fill the field.
30. Wild-goat with head of another behind. (Complete lentoid.)
31. Cow suckling calf. (Usual type.)
32. Two calves in reversed positions. (Lentoid form complete.)
33. Seated oxen in reversed positions.
34. Numerous fragments of cattle pieces.
35. Two crouched dogs (?) confronted.
36. Bitch suckling pup.
37. Collared bitch and two puppies, one in field above. (Lentoid form complete.)
38. Bulls, &c. with symbols—Minoan shield and 'impaled triangle'.
39. Flying bird.
40. Two fish in reversed positions.
41. Two ducks in reversed positions.
- 42, &c. A large number of fragments of animals, many of them in groups.

Selected Types.

Selected
types.

The selected types shown in Fig. 597 A, B, may be regarded as fair illustrations of the seal-engravers' art at the time of the great catastrophe that closed the palatial age on the site of Knossos about 1400 B.C., and which forms a convenient terminus for L. M. II. The clay impressions derived, as shown above, from a series of deposits (A-E) are themselves in many cases incomplete, and in definition of details naturally fall short of the originals in stone and metalwork from which they were taken. Owing to the fragmentary condition of so many specimens, the subjects, as described in the list, could often be only recovered by means of overlapping fragments, as was notably the case with the signet, Fig. 597 A, *c*, from the Central Palace Shrine. That the signets themselves may in certain cases have been in use for a considerable period of years previous to the date of this catastrophe, is always possible, and, indeed, the clay 'matrix', above referred to, itself goes back to the earliest L. M. I phase. As a whole, however, we have a fair guide to the prevailing sphragistic style.

Only in quite exceptional instances, such as Fig. 597 B, *b*, is there evidence of the continued use of the 'flat cylinder' form. The fine 'amygdaloids' are also at most very sparingly represented, the oval types that here appear in most cases probably belonging to signet-rings or 'elongated

oval' gold beads. Although it is often difficult to ascertain the original shape of the field, it is clear that at this time lentoid bead-seals were overwhelmingly predominant, some of them, as will be seen from Fig. 597 B, *e*, and its fellow, Fig. 602, p. 615, below, and *h*, of Fig. 597 A, being of abnormal dimensions. What has been above described as the 'lentoid' class of designs is here constantly illustrated.

Impressions of Gold Signets and others with Religious Motives.

Not to speak of the clay 'matrix', which must have been used as a substitute for an actual signet,¹ it is clear from the shape of the field and the character of the engraving that a fair proportion of these clay impressions were produced by the bezels of the typical Late Minoan class of gold signet-rings. Many of these—such as Fig. 597 A, *e*, *j*, and probably *h*—as usual depict religious subjects, but in Fig. 597 B, *m*, the 'prize' bull of Fig. 532, p. 564 above, and the milking scene of Fig. 534, p. 564, we seem to have instances of signet-rings the theme of which was purely bucolic.

Impressions of gold signet-rings.

As might have been expected, the religious subjects naturally attach themselves to the Central Palace cult, of which so complete an illustration was afforded by the signet impressions found within the wing of the little Shrine off the Central Court, here once more reproduced in Fig. 597 A, *e*. Good reasons have already been given for believing that the rocky peak, on which the Goddess stands with her lion guardians was, in fact, the summit ridge of Mount Juktas, such a prominent feature of the landscape from the Court itself. The male worshipper, here magnified to twice the proportions of the Goddess, might, indeed, be supposed to include in his act of devotion the mountain peak and distant shrine—a whole beatific vision—besides the actual divinity itself. On a smaller scale—perhaps as the youthful God—he reappears on another large sealing (C. 2, Fig. 596, p. 602), where the richly-robed female figure before him must certainly be identified as the Goddess. On the fragment *j*, the raised arm of a similar adorant is seen above the left wing of the typical Minoan pillar shrine, recalling that the plan of which is still traceable on the inner Palace façade.² On A, *b*, again, female adorants, in procession, repeat the same gesture.

Religious subjects.

Illustrations of Central Palace cult: Goddess on peak.

A whole series of partially broken sealings supplies slightly variant versions (e.g. *a* and *c*) of the Goddess raising her arms to the chins of her guardian lions. On *h*, she is replaced, in a similar attitude, by a figure in whom we may recognize her youthful consort or offspring. On another

¹ See pp. 396 and 595, above.

² See *P. of M.*, ii, Pt. II, p. 804 seqq.



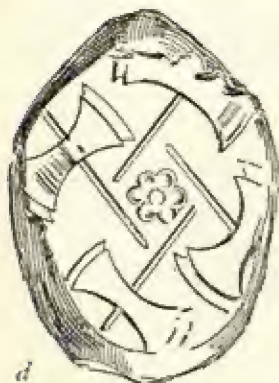
a



b



c



d



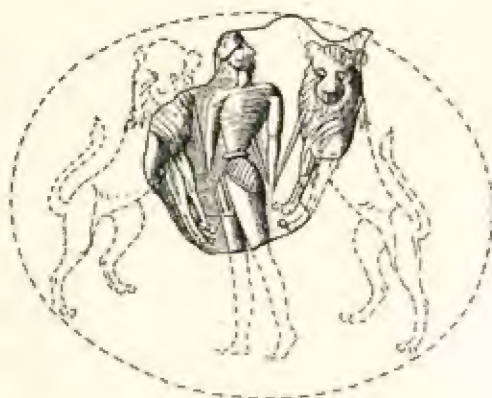
e



f



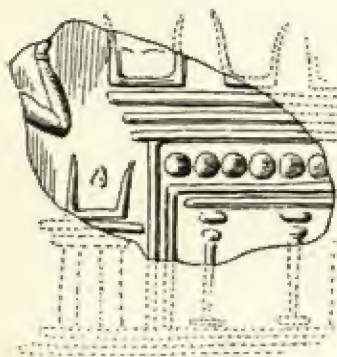
g



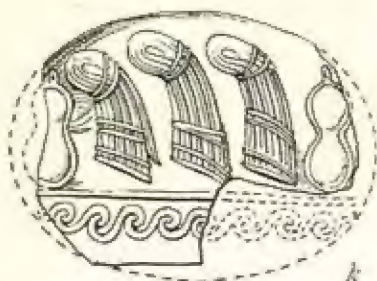
h



i



j



k



l

FIG. 597 A. SELECT EXAMPLES OF LATE PALATIAL SEAL IMPRESSIONS.

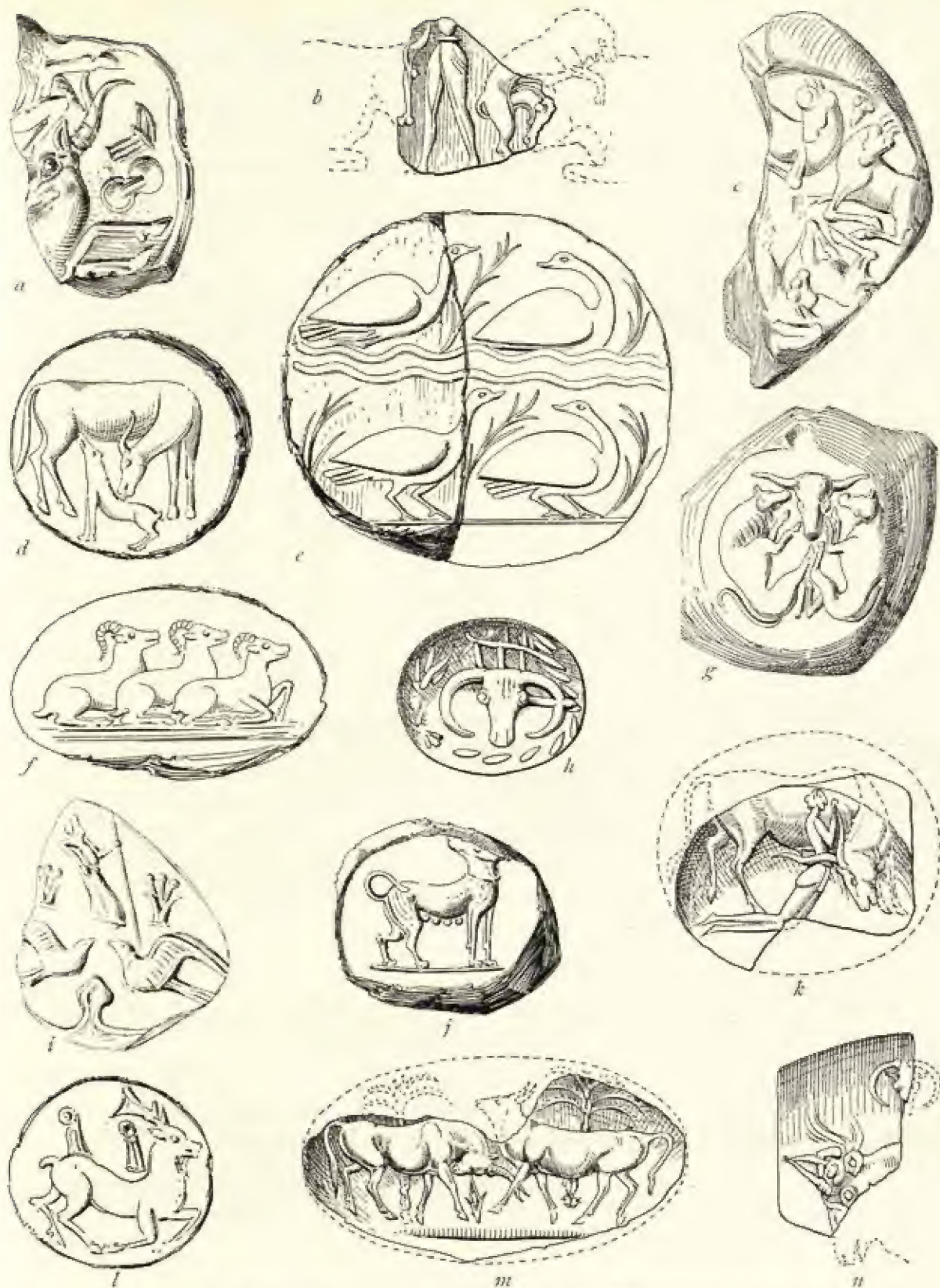


FIG. 597 B. SELECT EXAMPLES OF LATE PALATIAL SEAL IMPRESSIONS (*continued*).

sealing (D, 5) he holds out his hands above the lions' heads, as on a gem from Kydonia given above. Elsewhere, as we have seen, he stands between two Minoan Genii,¹ in one case, between the Daemon and a winged goat, with the sacral horns at his feet, and, on a seal already reproduced² from the Archives Deposit, his two supporters are collared hounds held by leashes.



FIG. 598. *a*, GOLD SIGNET-RING; *b* AGATE LENTOID: BOTH FROM MYCENAE ILLUSTRATING EQUIVALENCE OF GODDESS AND BAETYLIC COLUMN.

In this and similar schemes the place of the divinity between the animal guardians is taken by its baetylic form, such as a column or an altar base, or of both combined as in the case of the tympanum relief. A good example of the columnar version (showing 'sacral knots' attached to the capital) on a gold signet-ring from Mycenae, together with an agate lentoid from the same site, with the Goddess herself in place of her baetylic column, here given for comparison in Fig. 598 *b*.³ In this case, in place of the leashes of the collared hound, the guardian, regardant lions are attached by short cords to the pillar that could be infused by due ritual with the essence of the divinity.

Baetylic
Column
substi-
tuted
for
divinity.

Fragmentary Seal Impressions showing Sculptural Group of Lions' Gate Type on Cornice of Portico.

Of singular interest is the fragmentary seal impression, Fig. 597 A, *i*, from the Little Palace, found in association with that showing the adorant and part of a pillar shrine (Fig. 597 A, *j*). The guardian lions in this recall those

Sculptural relief of Lions' Gate

¹ P. 465, Fig. 389.

² P. 467, Fig. 392.

³ Both intaglios are in my own Collection.

See *Myc. Tree and Pillar Cult*, pp. 61, 62, and Fig. 39, and pp. 66, 67, Fig. 44.

on each side of the peak on which the Goddess stands, as seen on the signet-type of the Central Shrine (Fig. 597 A, *e*), but their closer approach in the present case makes it impossible to suppose that the Goddess her-

class on
cornice of
portico.



FIG. 599. M. M. III-L. M. I *a*, SEAL IMPRESSIONS SHOWING LIONS GUARDING INCURVED ALTAR-BASE. *a*, *b*, ZAKRO; *c*, HAGIA TRIADA.

self stood between them. The lions here, perhaps facing the spectator like the guardian hounds on Fig. 597 A, *g*, set their forefeet on a sacred peak recalling the cairn over which the Minoan Genii pour their libations in Fig. 380, p. 455 above.

The important point is that we have the familiar scheme of the confronted lions with their forefeet on a sacred object—here a baetylic cairn—adopted as an architectural adornment, set up above what may well have been the entrance portico of a building.

This, as envisaged by the engraver, certainly implied sculptural work in the round, but it is obvious that we have here a very near parallel to the Mycenae tympanum relief even as regards the general outline. It must be observed, moreover, that this scheme of confronted lions is at home on Cretan soil, appearing, indeed, in more than one form on transitional seal impressions of M. M. III-L. M. I *a* date, both at Zakro¹ and Hagia Triada.² In this earlier stage the heraldically opposed lions appear beside one of the incurved altar-bases—in one case contained within a shrine (Fig. 599 *a*, *b*, *c*). Later, as in Fig. 599, *c*, they set their forefeet on the base—in the case of the Lions' Gate on two separate bases.

Origins of
guardian
lion types
on Mi-
noan
seals.

The design on the sealing from the Little Palace (Fig. 597 A, *i*)—doubtless from a gold signet-ring—makes it clear that the type, as a symbol of divine protection, had become a subject of sculptural or plastic adorn-

Con-
nected
with
portals of
shrines.

¹ Hogarth, *Zakro Sealings*, p. 87, Fig. 28 (No. 112), and cf. *P. of M.*, i, p. 308. Fig. 599, *b* is drawn from another Zakro sealing, a variant example of which is given by Dr. Doro Levi, *Cretule*, &c., p. 99, Fig. 180.

² D. Levi, *op. cit.*, p. 33, Fig. 70.

ment on an entrance portico, perhaps belonging to the sanctuary building in which it was found. Its earliest appearance in Crete was in connexion with the portal of a shrine (Fig. 599, *a*). The Lions' Gate of Mycenae—probably somewhat earlier in date than the Knossian design—itself fits into the Minoan series (Fig. 600).

**Design on Cornice of Portico reflecting Sculptural Group of
Lions' Gate Type.**

Considering the position in which the group is placed on the seal-type from the Little Palace, we may infer that it stood quite free and open to the sky, like the statues and sculptured groups on classical cornices. In a work that had no backing and was therefore executed in the round, there is some presumption for supposing that it was executed in stone—according to the usual composite methods—rather than in hard plaster such, as we know, was usually employed at Knossos for plastic reliefs. Of free standing sculptures in the round that may have existed above the porticoes or on the cornices of either the greater or the lesser Palace, little light could be hoped from the excavations, which mainly concerned interior elements, but that such had existed in connexion with the sanctuaries here brought out was rendered evident by the discovery of the steatite locks of a Sphinx,¹ practically of life-size. This was built up by means of a composite technique, such as we again meet in the case of the bronze locks of a colossal wooden statue of the Goddess from the Great East Hall,² the height of which would have been about nine feet. Of a statue of nearly half-size we have the evidence in a hand of marble-like limestone,³ not to speak of the large stone statuette of the Snake Goddess described above, which is 40 centimetres ($15\frac{3}{4}$ inches) in height⁴ and in one piece.

The splendid achievements of the Minoan craftsmen in the shape of small reliefs on vases and the exquisite cutting of their architectural friezes and rosettes—both of which classes of minor Art attained their highest development in M. M. III—in itself makes it almost inconceivable that they should not have attempted stone reliefs on a larger scale. The probability, indeed, has already been urged that the fragmentary reliefs on slabs of Cretan gypsum found outside the 'Atreus' façade at Mycenae, representing respectively a charging and a stationary bull and belonging to the same cycle as the bull reliefs of painted stucco from the Portico of the Northern

¹ *P. of M.*, iii, p. 421 and Fig. 288.

about 90 cm. (2 ft. 8 in.).

² *Ib.*, p. 521 seqq., and p. 522, Fig. 366.

³ See p. 195 above, Fig. 150.

⁴ *Ib.*, p. 518, Fig. 363. Its height was

Entrance of the Palace, were imported works of a Knossian sculptor working on his local stone. The decorative and finely undercut reliefs in hard stone, of which we have already evidence in friezes of the South Propylaeum of M. M. III date, are of unsurpassed excellence both technical and artistic.

In the case of the Minoan Mainland School—where the material for the fine plaster was wanting—it was natural that stonework sculpture should have been predominant, though, except for the Lions' Gate, the evidence is scanty indeed. But to go beyond this and to make sculpture



FIG. 600. TYMPANUM RELIEF OF GATEWAY. MYCENAE FACING LIONS CONFRONTED BEFORE BAETYLIC COLUMN REPRESENTING THE MINOAN GODDESS: THEIR FEET ON A DOUBLE ALTAR-BASE OF THE INCURVED TYPE. (FROM DR. SCHLIEMANN'S ORIGINAL PHOTOGRAPH.)

in stone a special creation of some intrusive Northern genius on that side is, surely, a 'vain imagining' and in diametrical opposition to the existing evidence.¹ The limestone relief of the lions, though doubtless of local fabric, is itself not only in design and details, but in the composite addition of the original faces of the guardian beasts, purely Minoan both in inspiration

¹ It is necessary to emphasize these results in view of the obstinate adherence of some scholars to the received tradition. Thus I regret to note in Prof. Martin Nilsson's valuable and recently published *Homer and Mycenae*, p. 81, the following passage—'Minoan Art is always essentially a small art. It does not know any sculpture of great size.' In face of the planning—both grand and elaborate—of the Domestic Quarter at Knossos, and the splendid *crescendo* of the entrance halls of both the Great and the Little Palaces, we are met with the remark that 'The vastness of the palaces . . . is achieved by

adding one room to the other as the cells in a bee-hive.' He adds that 'the Mycenaean Age has created the only monumental sculpture of the Bronze Age, that of the Lion Gate at Mycenae'. Accordingly the 'Tomb of Atreus' still belongs to 'L. M. III', a classification and chronology, as shown above (Pt. I, § 97), quite foreign to the present work.

Excluding the late 'Re-occupation' sherds, the rule is that the latest pottery of the great *tholos* tombs is L. M. I b. The late L. M. III ('L. H. III') element only appears as a late and barbarous intrusion.

and execution. Its association with the incurved altar-bases itself goes back at least two generations on Cretan soil.

Frequency of
Lions'
Gate
scheme

Divine
presence
variously
indicated.

It is in L. M. I *b* continuing into L. M. II, that the Lions' Gate type attains its greatest vogue on seals. Often, as in Fig. 597 A, *g*, two confronted hounds, collared, but of very wolf-like aspect, place their feet on the incurved altar-block, the central column is omitted, though the celestial element is here indicated by the stellar symbol above. In Fig. 597 A, *l* there appear two Griffins back to back, of the crested kind like those of the Throne Room frescoes, without any baetylic block or pillar between them. A flying bird, inserted in their stead, is itself a well-known emblem of spiritual manifestation.

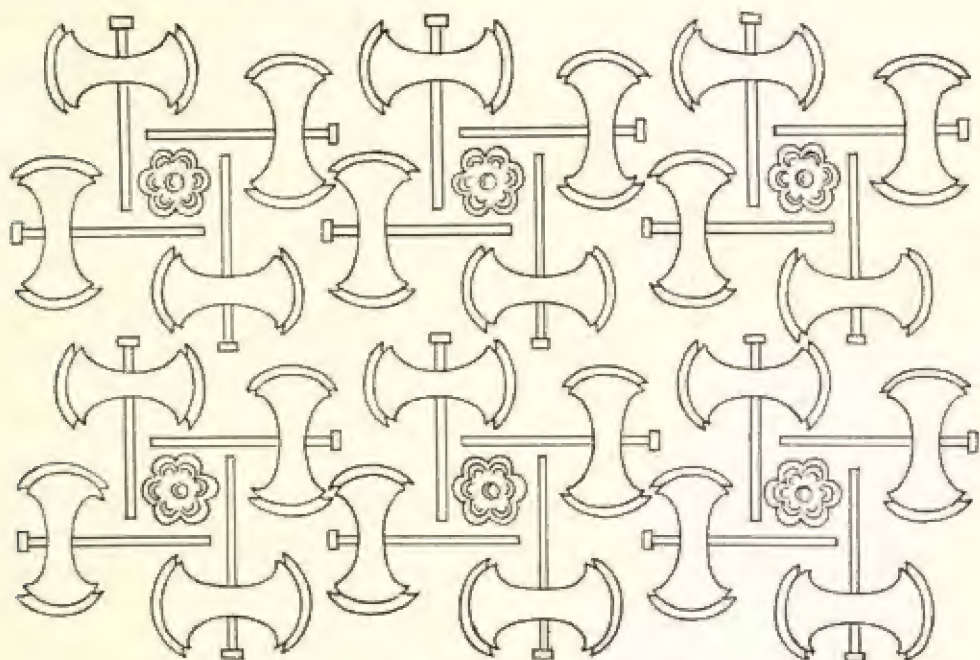


FIG. 601. CEILING PATTERN RESTORED FROM DECORATIVE GROUP OF DOUBLE AXES AND ROSETTE ON SEAL IMPRESSIONS (P. 608, Fig. 597 A, *d*).

Decorative Double-Axe Group suggestive of Ceiling Pattern.

Double
Axes
decora-
tively
grouped.

Fig. 597 A, *d*, showing four sacred Double Axes symmetrically grouped round a central rosette, suggests an appropriate pattern for the ceiling of a Palace Shrine (Fig. 601). In *k*, above a running spiral band that also implies an architectonic association, three 'sacral knots' appear between two Minoan shields, also a recurring symbol of the divinity. The forearm on *f*, adorned with a bracelet, grasps the sacred fleur-de-lis.

Miscellaneous Motives: Cattle Pieces and Typical 'Lentoid' Schemes.

Among the everyday types of seal impressions, that reproduced in Fig. 597 B, *e*, and a closely parallel specimen from the Armoury Deposit, Fig. 602,¹ here reproduced for the sake of comparison, are interesting, not only as illustrations of exceptionally large lentoids, but from the obvious dependence of the representations of water-fowl on the 'Nile pieces' in vogue among the Late Minoan artists. These two seal-types seem to represent the work of the same engraver, only slightly modifying an identical design. The double zones in which the birds appear are, in fact, a reminiscence of the successive registers in which contemporary wall-paintings were arranged.

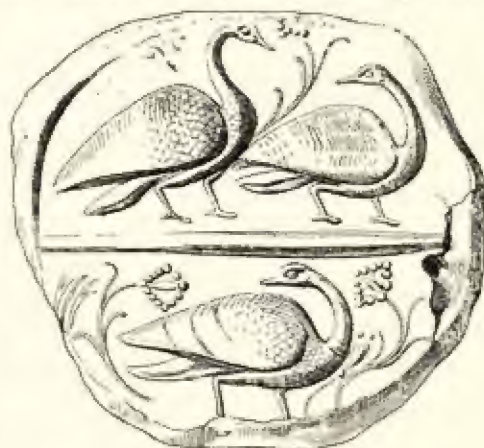


FIG. 602. LARGE SEALING FROM ARMOURY DEPOSIT. (2)

Predominance of lentoid bead-seals; large examples.

The surviving vogue of bull-grappling scenes is attested by *k* and *n* but at this time types of a simply bucolic nature became more prominent. Late Palatial seal impressions presenting such motives have already received illustration, such as the scene of the 'Cattle show'² and the boy milking a cow.³ In Fig. 597 B we see a series of groups of oxen and horned sheep (*c*, *f*, *m*). The two bovine animals on a seal impression already illustrated,⁴ standing on an architectonic base with a columnar support, are taken, seemingly, from some existing relief and must be regarded as having a dedicatory character. In Fig. 597, *n*, *d* the familiar cow and calf motive reappears. The symmetrically arranged and closely packed designs, like other seal impressions from these deposits already figured, afford good examples of the 'lentoid' class.

Frequency of bucolic motives.

Typical lentoid designs.

Three important types in which horses appear are reproduced in a succeeding Section.⁵ Another, insufficiently baked, with a chariot scene was, as already recorded, reduced to pulp by a sudden storm of heavy rain.

Chariots and Horses.

¹ *P. of M.*, iii, p. 117 and Fig. 67. See, too, A. E., *Knossos, Report*, 1904, pp. 56, 57, Fig. 19.

² P. 564, Fig. 532 above.

³ *Ib.*, Fig. 534.

⁴ See above, p. 568, Figs. 542 *a*, *b*.

⁵ See below, pp. 827, 828, Figs., 805, 808, 809.

Seal Impressions countermarked with Graffito Signs of Script B.

Graffito signs of Script B as countermarks on seal impressions.

Some of the clay seal impressions, both from the above-mentioned Deposits as well as those found elsewhere in association with hoards

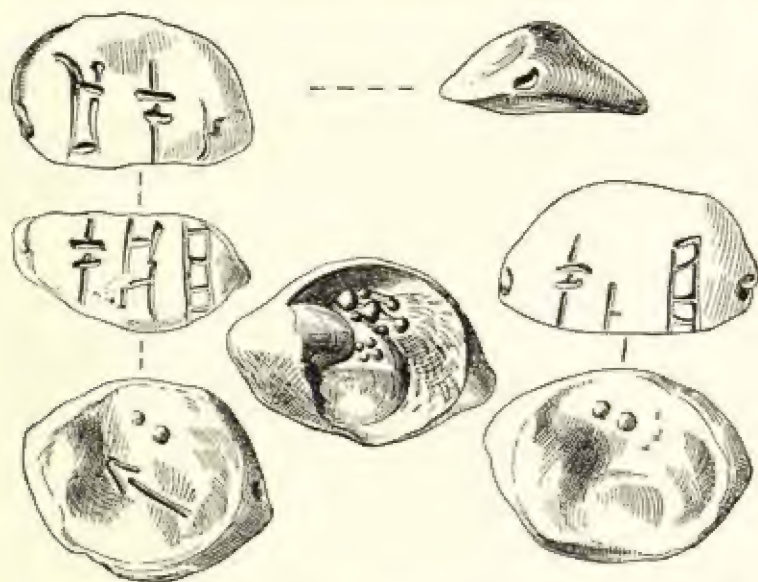



FIG. 603. CLAY SEALINGS FROM CHESTS CONTAINING ARROWS OF 'ARMOURY DEPOSIT' ROUGHLY IMPRESSED WITH LION SEAL AND COUNTERMARKED WITH SIGNATURES AND 'ARROW' SIGN.

of tablets, presented a further evidence of connexion in the shape of graffito signs of the same Linear Class B as the tablets with which they were associated. These signs had been incised into the reliefs of the designs on the sealings when the clay was still wet, and had been used either as countermarks or with a view to cancellation by the controlling officers.

In some cases—as exemplified by the inscribed disks referred to above¹—in place of the impression of a seal, the pinched clay nodules that served for attachment were certified by means of graffito inscriptions, as was so often the case among the three-sided sealings of the hieroglyphic class.² In certain sealings of the closing Palatial epoch at Knossos, again, we see a survival of this practice on two of the sides, where graffito inscriptions appear—presumably signatures or titles—while the principal face is impressed with a signet design, itself countermarked. In both

¹ See above, p. 597.

² See *Scripta Minoa*, i, p. 163 seqq., and Pl. IV A, B.

titles, as seen in Fig. 604, *a*, *b*, the throne sign, —the mark of a Palace official—is included.

Good examples of this double means of obtaining security, as applied to the sealing of chests containing valuable stores, came to light in the



FIG. 604. CLAY SEALINGS WITH SCENES FROM BULL-SPORTS, COUNTER-MARKED BY 'BALANCE' AND BARRED Z SIGNS, AND ENDORSED WITH GRAFFITO SIGNATURES, IN BOTH CASES CONTAINING THE 'THRONE' SIGN.

building described as the 'Armoury', North-West of the Palace.¹ The contorted lion design, of which at times very rough impressions were found at the base of the sealings belonging to this group (Fig. 603), had been in some cases countermarked by the arrow sign. The appropriateness of this as a mark of control was illustrated not only by the occurrence in the same deposit of tablets inscribed with this sign and referring to two large lots of arrows, respectively 2,630 and 8,540 in number, but by the discovery of two depots of bronze arrow-heads, each of which had been contained in a wooden chest with bronze loop handles. The sealings themselves were found among the charred remains of these coffers, which had evidently been secured by the string that had passed through the major axis of each.

Arrow
sign mark
of the
'Armoury'
Deposit.

¹ See A. E., *Knossos, Report, 1904* (B.S.A., x), p. 54 seqq. The tablets, seal impressions, and remains of wooden chests found in

a ground floor space here had fallen from an upper chamber.

The lion seal used for these impressions seems, curiously enough, to have been identical with that which had been made use of for a clay seal brought to light in association with the tablets containing lists of men found in the South Eastern quarter of the Palace, near those relating to hoards of bronze swords. In that case the impression is countermarked with a 'man' sign similar to the ideograph of the tablets.

Counter-
marked
sealings
of West
Maga-
zines.

Good specimens of sealings, some countermarked, as well as abundant remains of deposits of inscribed tablets fallen from storerooms or offices above, were found in or near the West Magazines.¹ Fig. 604, *a*, depicts a coursing bull countermarked by something much resembling the 'balance' sign. Fig. 604, *b*, from the Fifth Magazine, shows a male figure in a conical helmet grappling a mighty bull by the horns and neck,² which is countermarked by the 'barred 2' sign. The fine intaglio from which the impression was taken would have supplied a good specimen of the gem-engraver's art in the last palatial epoch. At the same time the intaglio itself—so skilfully packed into the round field—affords another characteristic example of the fully developed 'lentoid' style of the palmy days of L. M. II.

This noble composition forms a fitting close to the long series of examples of the gem engraver's skill throughout the days of the highest development of Minoan Art, from the Eighteenth to the close of the Fifteenth Century B. C.

¹ See *Scripta Minoa*, pp. 42, 43, and Fig. 20 *a*, *b*.

² See *P. of M.* iii, p. 231, Fig. 163.

§ 109. LATER PHASE OF WEST MAGAZINES, UPPER AND LOWER—'CEREAL' TABLETS AND BASEMENT OIL STORAGE: TYPES OF OIL JARS OR *PITHOI*. DISCOVERY OF STANDARD WEIGHT—'BALANCE' AND 'INGOT' SIGNS ON CLAY INVENTORIES.

Clay sealings countermarked by signs of Script B—derived, with tablets, from upper chambers; The Upper West Magazines; Stored grains and 'Granary' tablets precipitated into Lower Magazine 3; Bifid vegetable sign—perhaps Millet—suggestive of Millet beer; Appearance on lentoid signet; Barley sign—ears moulded on jugs, also oat-like sprays; Enclave of 'Kaselles'—once Treasure Cists; Larger vats for oil; Final phase of West Magazines—oil storage predominant, with superficial basins; Degenerate survival of 'Medallion' type among later pithoi; True 'Medallion' pithoi on earlier floors, others transferred to later floors; Evidence of original plait-work bands on 'Medallion' pithoi; Its bearing on steatite examples found in 'Atreus' tomb; M. M. III prototypes of normal pithoi of L. M. II Class; L. M. Ib inscribed pithoi from Phaestos; Influence of L. M. I painted designs on pithoi of later class—plant designs, loop decoration and sacral 'Adder mark'; Rim profiles of pithoi; 'Bottle-shaped' class derived from basketry; Evidence of about 200 pithoi in position—accommodation for 380 in W. Magazines; Estimate of total oil storage; Roofing over of Magazines VII-X—remains of painted dadoes; Discovery of standard Palace weight with octopus reliefs, representing light talent; Copper ingots of this talent weight; Late Palatial disk-shaped weights; Their graduated numeration and equivalence to Egyptian units; Others answering to light Babylonian standard; Equations with Egyptian gold units; 'Ox-head' and 'Sphendonoid' weight; 'Balance' sign on libation vase of hard stone with boustrophêdon inscription; The sign (τάλαντον) on tablets, coupled with 'ingot'—60 with one-eighth deducted; Late Minoan 'dumps', predecessors of Coinage—electrum example from Palace site; Gold rings and bars mediums of Currency—a Minoan 'shilling' (skilling); Discovery of gold 'Weight seal'—an Egyptian gold unit.

IN addition to the considerable hoards of clay sealings found in the Domestic Quarter of the Palace (where they were to a large extent derived from the 'Room of the Archives') repeated finds of these were brought to light, above the floor level, in excavating the West Magazines. In this case, even more than in the other, these were associated with the remains of large deposits of clay tablets of the Linear Class B.

As in the former case, moreover, several of these sealings had been

Inscribed clay sealings from W. Magazine countermarked by sign-groups of Script B.

Precipitated with tablets from upper

countermarked by graffito signs of this form of script. (See Fig. 604 *a, b*.) All these remains had been in a similar manner precipitated from an upper story where, for the sake of dryness, such documents would preferably be preserved. It will be seen, indeed, from the revised plan,

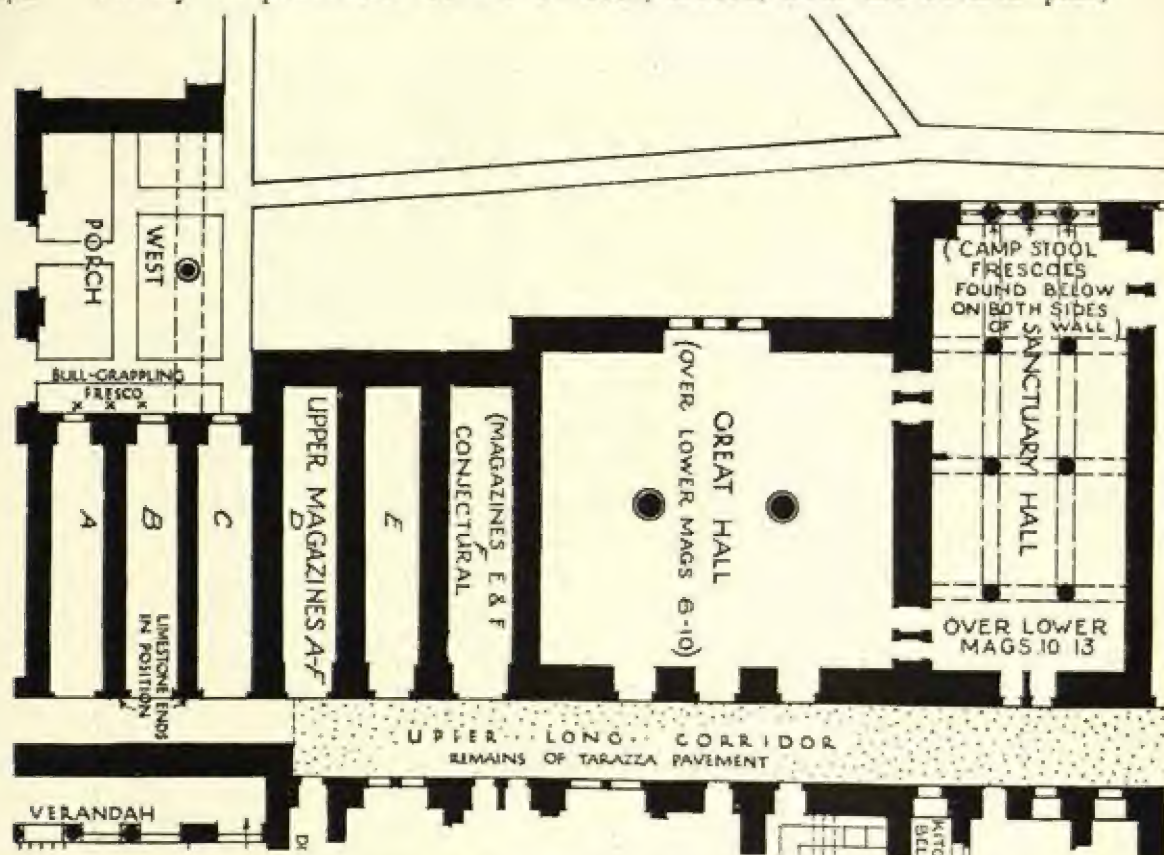


FIG. 605. REVISED PLAN OF UPPER PALACE SECTION ABOVE PART OF WEST MAGAZINES AND THE LONG CORRIDOR SHOWING UPPER MAGAZINES A-F.

chambers. The Upper West Magazines.

Fig. 605,¹ that six of the basement Magazines² (see p. 631, Fig. 621) answer to the same number of similar chambers above, marked A-F. Of these A-E are clearly evidenced by the door-jambs and parts of the upper walls, preserved more or less at their original level and shown, with some slight restorations, in Fig. 606, while the existence of E and F is a logical deduction. A view of the entrances of three of these Upper Magazines—B, C, D—as partly restored, at their original level, is given in Fig. 605, together with the Upper Corridor floor and the piers of the under-

¹ See revised Plan C at the end of this Volume.

² Including the original Magazine C, later reduced to a mere passage-way.

lying basement Magazines. Those above had doubtless served primarily as store-rooms, but the remains of tablets of Class B precipitated from them indicated that they had also served in part as repositories for such documents.



FIG. 606. VIEW FROM NORTH BORDER OF UPPER LONG CORRIDOR SHOWING REMAINS OF JAMBS OF UPPER WEST MAGAZINES ABOVE THOSE BELOW.

The entire clearing out of the basement spaces below the Upper Magazines A-C, at some period of which there is no record, had destroyed all evidence as to the nature of the stores that they once contained. With regard to D, however, some data regarding the materials derived from it have been preserved.

The Third Magazine that underlies the Upper Magazine D, and a small adjoining area of the Long Corridor, as well as

Stored grains precipitated into lower Magazine 3-

the opening of the passage leading thence to the Pillar Rooms, had been the scene of a promiscuous dig in search of ancient objects at the hands of a native explorer.¹ In the course of this, twelve large *pithoi* were extracted, and near them were found carbonized peas and small beans,² of the kind known in Crete as 'Egyptian beans' and, till lately at least, imported from Alexandria. According to an account, moreover, given me

¹ Mr. Minos Kalokairinos, a merchant of Candia, much interested in Cretan antiquities. See p. 623, n. 2 below.

² B. Haussoullier, *Rev. Arch.*, 1880, ii, p. 361, Note 5 (cf. *Bull. de Corr. Arch.*, iv, p. 187) mentions these as having been found

near the jars. All the objects found, except one or two *pithoi* given to Museums, were destroyed at the Fire on the occasion of the Insurrection and Massacre of 1899 when the whole Christian Quarter of Candia was burnt.

by an eye-witness of the excavation, burnt barley-corns also occurred, and some of these vegetable products lay inside the *pithoi*. There can be no doubt, however, that, like the painted pottery—then called 'Mycenaean'—found at the same level, these grains had fallen from the floors above. The exhaustive examination of the contents of the great jars in the Magazines of both sections of the Palace, made in the course of my own excavations, failed indeed to discover any traces of corn or any other grains within them, and the negative evidence is so overwhelming as to necessitate the conclusion that the *pithoi* were exclusively used for the storage of oil.

The 'Granary' Tablets: Cereal Signs and Remains.

Carbonized grains of millet found in E. Quarter.

There is, as will be seen, good reason for supposing that the corn belonging to the Palace lords was mainly stored in granaries outside the walls. The only good evidence of internal storage of grain is supplied by the discovery of a deposit of burnt corn in the narrow area North of the 'Loom-weight Basement' on the East side, containing a M. M. III filling in which a group of faience plaques known as the 'Town Mosaic' was brought to light. The corn which may have been stored in some upper Magazine of the Palace on that side seems clearly,¹ from the grains preserved (Fig. 607), to have been, in this case, some kind of millet.



FIG. 607. CARBONIZED GRAIN OF MILLET FROM DEPOSIT N. OF LOOM-WEIGHT AREA. (2)

'Granary' tablets also associated with Magazine D.

The occurrence of barley, peas, and beans in the Third Magazine—probably derived from the Upper Magazine D, that overlay it—stands in relation to another discovery made in the same basement area and the adjoining entrance section of the small Corridor leading to the Pillar Rooms. Amongst the materials precipitated into this area from the upper

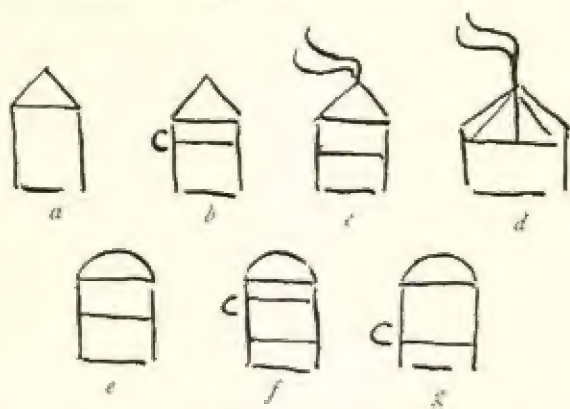


FIG. 608 SPECIMENS OF 'GRANARY' SIGNS.

¹ There were burnt remains as of a superficial envelope above the cores of the grains as shown in the figure.

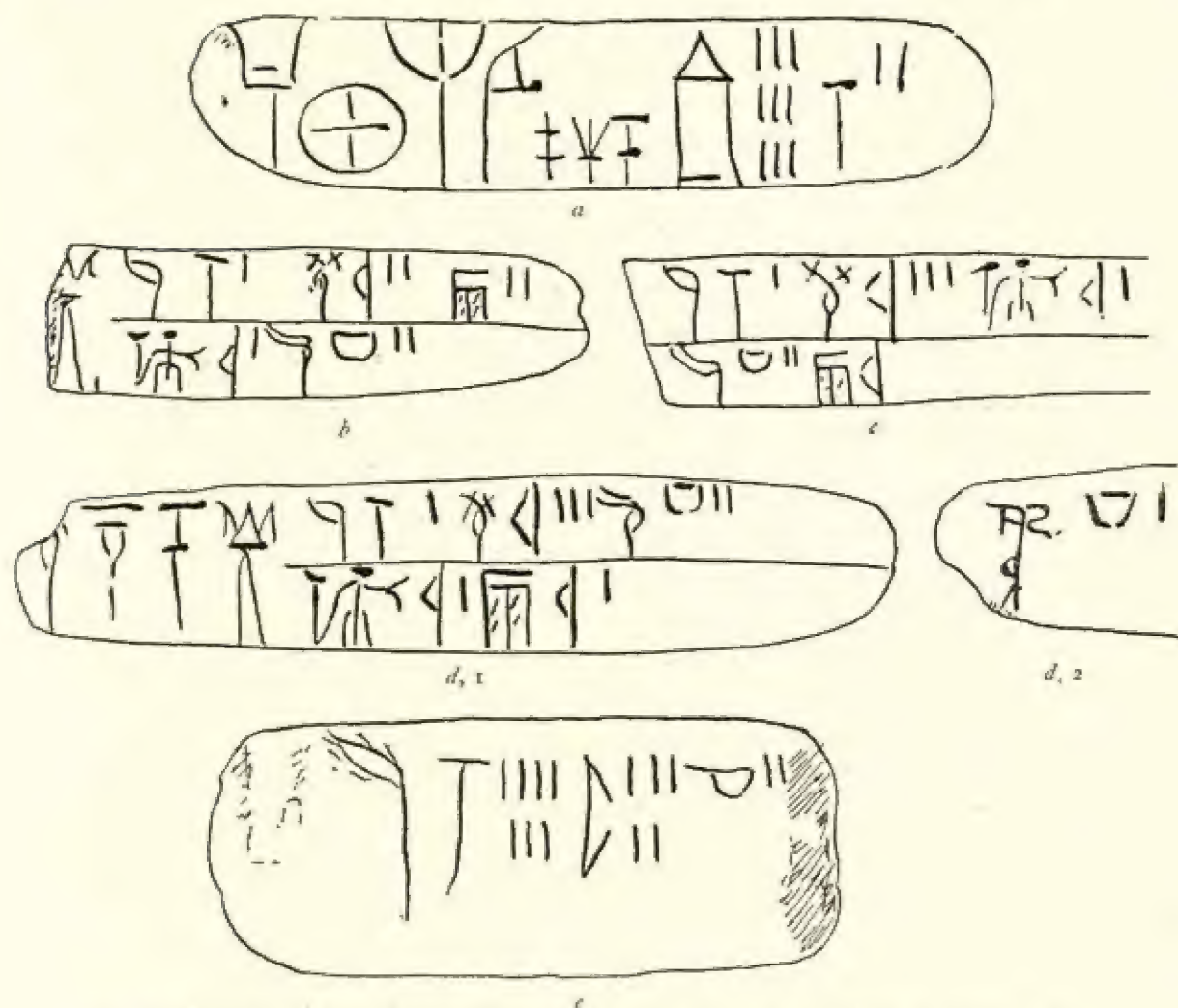



FIG. 609. CLAY TABLETS OF THE LINEAR CLASS B WITH INVENTORIES PRESENTING GRANARY AND CEREAL SIGNS.

floor were found a series of tablets (Fig. 609, *a*)¹ accompanied by the pictorial sign , which must certainly be taken to refer to a granary or store-house of some kind (Fig. 608, *a*).² It shows no signs of eaves, and at times

¹ Haussoullier (*B. de Corr. Hell.*, 1880, p. 125; *Rev. Arch.*, 1880, p. 339) remarks of the previous dig in this area 'les travaux ne mirent au jour aucune inscription'. As a matter of fact the tablets later brought to light here lay, partly in the earth left unexcavated, partly in the dump heaps re-explored

by sifting. They have not, however, in any case (as M. Haussoullier seems to have hoped) added to the materials for *Greek* epigraphy.

² The passage—at the opening of which these tablets were first found—was at the time called the 'Corridor of the House Tablets'.

The
'Granary'
sign.

the covering takes a rounded form (Fig. 608, *e, f, g*). Often there is a horizontal line or lines across the body of the structure, as of a strengthening girth and, in relation to this, a C-like loop at the side resembling a handle (Fig. 608, *f, g*). Taking the various features together, it looks as if these objects were of circular shape, and perhaps of no very great size, to be compared with the wicker-work structures, thatched above, so commonly used for maize or other stores throughout Eastern Europe.

The tablets refer to considerable groups of these, in two cases apparently 35, though lesser numbers 13, 7 and 2 also follow this sign.

Bifid
vegetable
sign con-
nected
with
'Granary'.

That the structures here figured were used for the storage of cereals is conclusively shown by the discovery in the upper part of the earth deposit,¹ in the Ninth Magazine, a little North of the first group of Tablets belonging to this class, of remains of another hoard in which the same object appears with what must certainly be regarded as a vegetable sign, rising from its summit (Fig. 608, *c, d*). This sign appears, indeed, as an independent element on several tablets (Fig. 610 *a-d*).

Appear-
ance on
lentoid
signet.

In connexion with this bifid vegetable symbol it was my good fortune to acquire, somewhat later at Athens, a large lentoid gem of green jasper, in a contemporary style (Fig. 611), in which the same sign is seen. It there rises behind a figure of a bull with its head turned to the near hind-leg, as in schemes referred to above, the animal being seized on above by two heraldically opposed Griffins. Between these this vegetable symbol shoots up above the bull's back. The bead-seal was said by its possessor to have been found in Crete, and there is every reason for concluding that we have here the signet of a Palace official charged with the superintendence of a granary department.

The sign here presented is followed on tablets by numerals ranging

¹ One was found above the top of the adjoining West wall of the Palace.



FIG. 610. 'BIFID' CEREAL SIGN.



FIG. 611. GREEN JASPER SIGNET: BULL ATTACKED BY TWO GRIFFINS WITH CEREAL SIGN BETWEEN THEM.

from one or more units to 152. It is seen to alternate on them with parallel ideographic figures relating to cereals. In some cases, moreover, this is succeeded on the clay inventories by the bowl sign \cup , sometimes shown with a handle \cup . On the back of certain tablets, e.g. Fig. 609 *d* 1, where this conjunction occurs, the bowl sign is repeated, with a well-known composite sign of Class B, 𐀂 , before it (Fig. 609 *d* 2). This sign is a regular concomitant of vessels of various forms in use for liquid contents. In view of this fact we may infer that in the present case it had a similar signification, and refers not to the actual produce of the plant but to a drink made from it.

Followed by bowl sign-mark of liquid contents.

Summary as is the sketch of the vegetable form here presented, its grouping with unquestionable cereal forms, such as are shown in other tablets, sufficiently indicates that it was a food plant of the same class. From the wavy outline of the ears, and the constant division of the stalk into two main stems, it seems probable that we have to do with millet, of the actual storage of which in the Palace evidence has been given above (see Fig. 607 *a*, *b*). In the cases where the 'bowl' sign is added, we may therefore conclude that it refers to some kind of drink brewed

Proposed identification with millet.

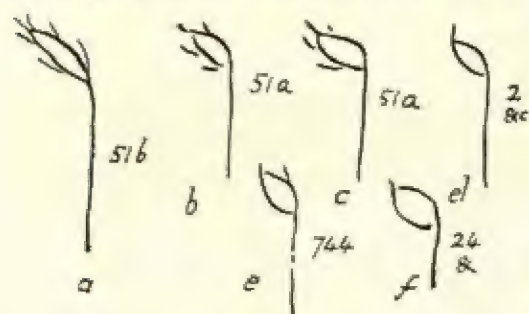


FIG. 612. EAR OF BARLEY ON TABLETS. (NUMBERS REFER TO HAND-LIST.)

from this, such as the millet beer made, according to Hekataeos, by the Paeonians.¹ Millet itself throughout a large part of primitive Europe and Asia Minor was the 'Staff of life',² and its name *panicum* recalls the fact that, to the Italic race at least, it was the original material of bread.

¹ Millet beer of Paeonians.

a parallel ideographic figure representing an ear of corn on a stalk. In some cases this is bearded (Fig. 609 *e*), but it seems probable that the simpler unbearded forms that more frequently occur (Fig. 609, *b*, *c*, *d*) really represent the same cereal, since they occupy identical positions in similar formulas. On a series of these both varieties are followed by the 𐀂 sign, also coupled in the same way with the 'granary'. There is further associated

On several tablets (Fig. 609, *b*, *c*, *d*) this sign alternates with

Barley corn associated with other cereal signs.

¹ Athenaeus, x (p. 447, *c*); 'Εξαταῖος δὲ . . . Παλαίος φησι πίνειν βρώτον ἀπὸ τῶν κριθῶν, καὶ παραβίην ἀπὸ κένχρου καὶ κορύζης.

² See Hehn, *Kulturpflanzen*, &c. (1874, ed., pp. 483, 484).

Barley
Corns on
Clay Seal-
impressions.

with these another vegetable sign Ψ , which also appears as a regular character of the syllabary in Class B.

That the grain shown in Fig. 612, *a-f*, was intended to represent barley.



FIG. 613. PART OF CLAY SEALING SHOWING FACING HEAD AND BARLEY CORN.

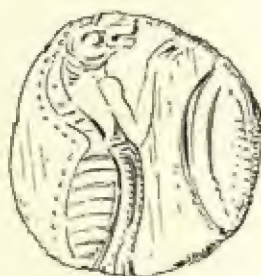


FIG. 614. MINOAN GENIUS BEFORE BARLEY CORN ON SEALING.

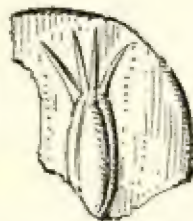


FIG. 615. SEAL IMPRESSION WITH GERMINATING GRAIN.



FIG. 616. GRAINS ON SEALING ARRANGED IN WHEEL PATTERN.

is made probable by the recurrence of what seem to be corns of this cereal on a series of contemporary seal impressions. Half of a clay sealing found in the upper filling of Magazine X shows a curious type consisting of a facing human head, part of a leonine body, and what must certainly be regarded as a grain of barley in the field (Fig. 613).

Parts of clay sealings with a similar facing head,¹ in this case with two grains of corn, were found in the Central Deposit of the Little Palace, while

Associated with facing head.



a



b

FIG. 617. SEALING FROM HIEROGLYPHIC DEPOSIT SHOWING ON ONE SIDE (*a*) GERMINATING BARLEY CORN, AND ON THE OTHER (*b*) THE DOUBLE-AXE SYMBOL.

¹ The facing head in an isolated position recalls one symmetrically placed in the middle space between two horned sheep in reversed

positions on a cornelian lentoid from the Phaistos Cemetery (*Mon. Ant.*, xiv, 752, Fig. 96).

another fragmentary impression from the same hoard (Fig. 614) depicts a Minoan Genius as promoter of vegetation, with raised fore-limb before a grain of barley, here rendered as large as the Daemon's body. In the same hoard of sealings occurred that shown in Fig. 615, as sketched at the time of excavation. Here we see the same grain in a state of florescence or germination, a version of which motive that had been already frequent on sealings of the hieroglyphic class, always in isolated positions. It thus appears on a clay label¹ with a sign group in the upper register, and followed by numerals indicating 32.² On the clay seal impression (Fig. 617) it is coupled on the other side (*b*) with the Double Axe—endorsed, that is, with the 'signet' seal of a Steward of the Palace Sanctuary.



FIG. 618. BARLEY SPRAY IN MOULDED RELIEF ON M. M. III *a* VASE.

On the seal impression from the 'Archives Deposit' of the later Palace, of which other, more fragmentary specimens were found, eight grains of corn are grouped in a wheel-shaped pattern (Fig. 616). What seems to represent the same design already appears on an ivory cone of Early Minoan type from the Platanos *tholos*,³ and groups of grains are a recurring feature of seal impressions belonging to the beginning of the Middle Minoan Age. A jasper prism seal from Mirabello of the hieroglyphic class presents what seems to be an ear of barley with indications of the beard.⁴

What have been identified in a previous Section with ears of barley are moulded in high relief on a class of jugs belonging to the earlier phase, *a*, of M. M. III⁵ accompanied by other raised decoration representing a survival of the 'barbotine' work. A specimen of one of the triple sprays of barley seen on these vessels is reproduced in Fig. 618,⁶ and we may well suppose, as above suggested, that the liquor contained in these small jugs was not unconnected with 'John Barleycorn'. It is probable that

Barley
sprays on
jugs—for
barley
beer.

¹ *Scripta Minoa*, i, p. 217, No. 94, *b-f*.

² *Ib.*, p. 167, P. 85 *b*.

³ Xanthudides, *Vaulted Tombs of Mesari* (tr. Droop), Pl. XIII, No. 1043.

1v**

⁴ *Scripta Minoa*, i, p. 217, No. 95: P. 20 *b*.

⁵ *P. of M.*, i, pp. 414, 415, and Fig. 299 *a, b*.

⁶ See *P. of M.*, i, p. 415 and Fig. 299 *b*.

—as in Ancient Egypt and among many primitive European people—beer brewed from barley malt was drunk in Minoan Crete from a very early epoch, though its use may have been supplemented in Late Minoan times

by wine from the juice of the grape. The Goddess on the well-known signet-ring from Mycenae was certainly seated beneath a vine, if we may judge from its grape-like bunches.

The spikes of the outer sheath of the barley corns are not indicated in the moulded relief (Fig. 618), the artist—*more Minoico*—having contented himself with the grains themselves. But the triple rows in which these are disposed agree with the appearance, as seen from one side, of the typical primitive species of barley, *Hordeum hexastichum*, remains of which, as shown in Dr. Keller's illustration reproduced in Fig. 619, 1, 2, 3, were found in the Swiss Lake Dwellings,¹ and which, on the Mediterranean side, are so well illustrated by the coinage of Metapontion (Fig. 619, 10, 11)



FIG. 619. FOUR-ROWED BARLEY AND GRAIN FROM SWISS LAKE STATION (RÖBENHAUSEN): FROM KELLER. THE SAME BELOW ON COIN OF METAPONTION.

—the Achaean foundation, whose earliest traditions were connected with Nestor's Pylia.²

As a supplement to the jugs showing the ears of barley in relief, attention deserves to be called to a painted vessel of an unusual L. M. I ♂

¹ F. Keller, *Pfahlbauten: sechster Bericht*, Zurich, 1866, Pl. XVII (of which a section is here reproduced) and p. 317. In the Röbenhausen Station, where most of the vegetable remains were collected, a link with Crete is preserved in the capsule of *Silene Cretica* (*Ibid.*, Pl. XVII, Fig. 30). Dr. Oswald Heer

(*op. cit.*, p. 315) reaches the conclusion that the 6-rowed barley of the Lake Dwellings is really the predecessor of the 4-rowed kind ('So ist wahrscheinlich die kleine sechszeilige Gerste der Pfahlbauten die Urform, von welcher die vierzeilige entsprungen ist').

² Strabo, *Geogr.*, vi, c. 1.

style, restored in Fig. 620 *a* from fragments found in a disturbed medium West of the Palace.

The design on it—of great interest from its reflection on an Amisos rhyton¹ (Fig. 620 *b*)—recalls that of the contemporary group, depicting tufts of grasses or reeds,² but here the sprays on the shoulder of the jug have a cereal aspect. From the way, indeed, in which the grains broaden out and stand free of their stalks, a suggestion is here conveyed of some kind of oats, such as *Avena orientalis*. As a food plant, oats are un-classical, but the analogy of the barley on the former group of jugs makes it probable, if this identification be correct, that the Minoans also drank some brew of oats.

The Lower West Magazines and the Great *Pithoi* for Oil Storage.

The bulk of the storage of corn and other alimentary products was, as already stated, probably effected by granaries or other store-houses outside the Palace. That a smaller amount of such stores, for which place was found within the walls, was, for the sake of dryness, preserved in upper chambers,

¹ See, below, pp. 764-5, and Fig. 747.

² *P. of M.*, iii, pp. 277-9, Figs. 186, 187.



FIG. 620 *a*. L. M. I *a*. JUG WITH PLANT DECORATION.



FIG. 620 *b*. PLANT DESIGN ON JUG: SUGGESTION OF OATS.

is a natural conclusion, and agrees with the evidence at hand. The barley, peas and beans that had been deposited in an upper level of Magazine III had fallen from a store-room above. The heap of burnt millet in the basement space of the East Quarter had certainly been precipitated from an upper floor.

But liquid produce in the shape of oil had, from the earliest palatial Age, found its proper receptacles in the great jars of the basement cellars.

Successive Phases of West Magazines.

It has been shown above that the Magazines of the West Palace Section passed through three distinct periods.¹ According to the original arrangement they were made with broad openings convenient to admit the huge 'knobbed' *pithoi*,² of which examples are still to be seen in the East Magazines, as well as in the early store-rooms of Phaestos. There is every reason to believe that the sole contents of the Magazines was, at that time, oil.

Enclave
of
'Kaselles':
treasure
cists.

In the succeeding M. M. III Period, however, when the Priest-kings attained their greatest wealth, a whole block of the West Magazines—from 3 to 13 inclusive—was shut off by a cross-wall and doorway at each end, and the separate entrances of the chambers themselves narrowed, while at the same time cists or 'kaselles' of peculiar construction,³ ninety-three in all, were sunk into the floors, both of the Magazines themselves, and of the 'Long Corridor' into which they opened (see Plan, Fig. 621).

That these were for the deposit of actual treasure is proved by the fragments of valuable objects, such as caskets inlaid with faïence and crystal plaques and overlaid with gold foil, actually found within them. The fuller contents, indeed, of the contemporary 'Temple Repositories' with their exquisite figurines and reliefs, afford a parallel illustration. A remarkable feature of these treasure cists was the lining of their walls with sheet lead, the better to protect the valuable objects that they contained.

Larger
vats for
oil.

Oil, however, continued to be stored, though the jars for which there was space on the borders of the 'Kaselles' were of the slimmer 'Medallion' type. But, in addition to these, two-thirds of the section of the 'Long Gallery' (now shut off as an enclave) was provided with a series of squarer and more capacious receptacles, formed of limestone, instead of,

¹ *P. of M.*, i, p. 448 seqq. (Section 22).

² See especially *Ibid.*, Fig. 325, opposite

³ *Ibid.*, p. 231 seqq., and Fig. 175 (and cf. p. 452, p. 232, Fig. 174, from Phaestos).

as in the case of the others, gypsum slabs—the better to resist moisture. At the same time oblong cavities about six inches deep were cut in the base blocks of these, evidently designed for sediment. The whole of the

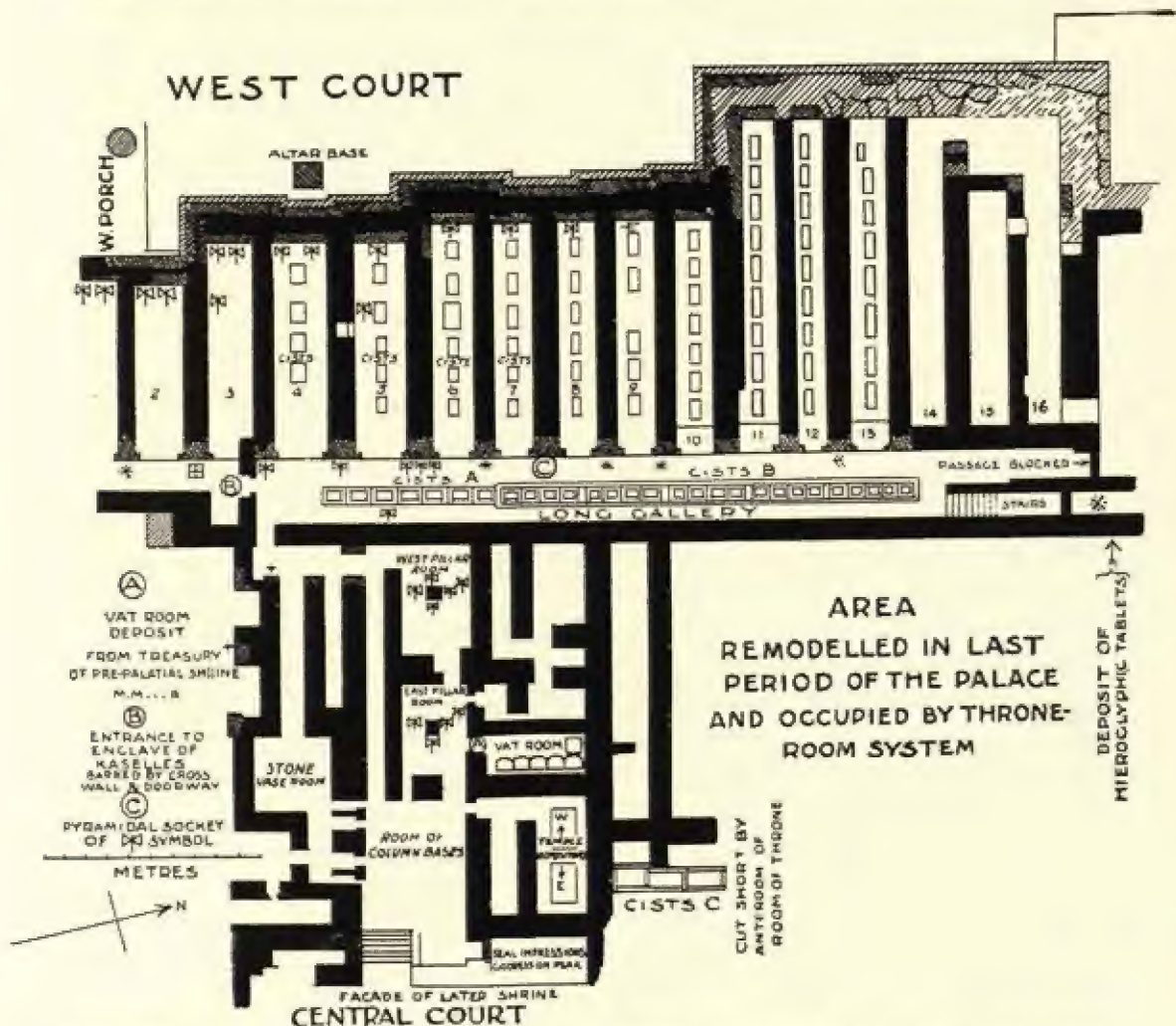


FIG. 621. PART OF WEST SECTION OF PALACE SHOWING 'ENCLAVE OF KASELLES'; TOGETHER WITH AREA EAST, INCLUDING PILLAR ROOMS AND TEMPLE REPOSITORIES.

interior surface of cists of this class¹ was coated with cement, and they must certainly be regarded as vats for liquid contents. The possibility suggests itself that oil, in its initial impure state—with water, probably,

¹ These cists are marked as B in the Plan (*Ibid.*, opp. p. 452) as distinguished from the ordinary 'Kasella' type A.

below—was poured into these, and subsequently 'skimmed' for storage in the jars.

That these vats remained in use to the close of the Palatial Age is shown in the case of the two nearest the staircase at the North end of the Gallery, by the occurrence, on the surface of the earth and rubble deposit with which they were finally filled in, of small bowls of Re-occupation date.¹

Oil Storage predominant in Final Phase of West Magazines.

Final
phase of
W. Maga-
zines.
Oil
storage
predomi-
nant:
super-
ficial
basins.

Finally, in the concluding phase of the West Magazines, we see, at a somewhat higher level, something like a reversion to their original arrangement. There was no question now of allocating any of the space for treasury purposes. The blocking walls and separate doors of the M. M. III enclave were done away with, and free access restored from the Gallery and passage beyond. At the same time the entrances of Magazines IV–XIII, so far as their doorways had been narrowed, were in most cases again widened out to the full width of the store-chambers. The 'kaselles' within them, like those of the adjoining Gallery, with the exception of the 'vats', were either paved over or reduced to mere superficial receptacles or 'catch pits'. These would be handy in various contingencies connected with the great jars themselves, and as useful intermediary basins into which the oil could be tipped from them when nearly empty.² The use of the superficial cists as oil vats is clearly evidenced by the signs of conflagration left by the smoke-stained borders of one in the Sixth Magazine, illustrated above.³ Some, at least, of the large vats in the adjoining Gallery continued to fulfil their special functions.

The whole of this large section of the West Magazines was thus once more confined to oil storage, and it is this stage, marking the course of the last epoch in the Palace history, which, as already shown, was brought to light by their excavation.⁴

This phase in their evolution owed its origin to the extensive scheme of restoration that followed on the great catastrophe at the close of M. M. III.

¹ From the lilac brown surface colouring of these they had at first been erroneously taken to be of M. M. III fabric (*P. of M.*, i, p. 453). The L. M. III *b* date of similar bowls found under the late blocking of the 'East Corridor' was, however, subsequently recognized (*op. cit.*, iii, p. 265).

² In Greece small 'vats' are still made in the floor of rooms in which there are oil jars. One principal object is to prevent the waste of oil caused by accidental breakage. (See A. E., *Knossos*, Report, 1900, p. 29 (*B.S.A.*, vi).

³ *P. of M.*, i, p. 459, Fig. 329.

⁴ *Ibid.*, p. 448 seqq., § 22.

There can be little doubt, indeed, that this widespread disaster—due in the first instance to an Earthquake of exceptional violence of which we have the actual traces¹—was followed by wholesale plundering of the sunken treasure cists of this area. This, in itself, made the renewed reservation of this basement section for oil-storage a natural solution. The impoverished Palace lords, from this time onward, had perforce to content themselves with treasure chambers of more restricted dimensions, such as that of which we have the evidence opening out of the 'Central Tricolumnar Hall' (see Revised Plan C) in near connexion with the Central Palace Shrine.

That this last re-modelling of the Magazines followed at no long interval on the closing catastrophe of M. M. III at Knossos is shown by the fact that three of the *pithoi* found in use on these floors belonged to the 'Medallion' style of that epoch.²

Survival of 'Medallion' *Pithoi*.

These 'Medallion' *pithoi*, indeed, the typical circular bosses of which represent an outgrowth of the earlier 'knobbed' (also 'bossed') class of M. M. II, themselves go well back within the borders of M. M. III. Some, indeed, as we have seen, were impressed with signets showing the 'façade' motive dating from the earlier part of that Period. A curious discovery made towards the very close of the excavation gives a fresh insight into the relatively early stratigraphic horizon occupied by the original floor-levels on which they stood, as compared with those of the last palatial phase.

Survival of 'Medallion' type among the later *pithoi*.

In the first year of the Excavation a small Magazine, adjoining that where the fallen column-bases came to light, was called at the time 'the Room of the Great *Pithos*', from a large jar of the 'Medallion' class, apparently standing on its floor-level. Only a quite recent re-examination of this vessel led to the discovery that the plaster floor surrounding a part of its lower circumference did not really represent the level of the base of the jar. Further excavation on one side brought out the fact that it rested on a M. M. III floor—some 30 centimetres lower—thus increasing its height by that amount. A remarkable feature of this *pithos* is the appear-

The Tall 'Medallion' *pithos* rising above later floor.

¹ See *ibid.*, ii, Pt. I, p. 297, Fig. 173.

² These were found in Mag. VI, No. 11 of my hand-list, and Mag. IX, No. 6 and Mag. X (see *P. of M.*, i, p. 563, Fig. 409: in the

Ashmolean Museum; presented to me by the Cretan Government). Another, No. 3 of Mag. VI (see Suppl. Pl. LIX, *b*), can only be described as a degraded offshoot.



FIG. 622. TALL 'MEDALLION' *PITHOS*, LATELY DISCOVERED TO BE STANDING ON EARLIER FLOOR LEVEL.

ance of two internal handles 65 cm. below the rim. These were probably designed to facilitate its transport.

Tall as it is, it still cannot compare with that of the giant, 'knobbed *pithoi*' of the East Magazines, one of which attains a height of 2.17 metres. Its height, however, is 1.75 metre, about a quarter of a metre higher than that of the tallest of the 'Medallion *pithoi*' of the 'Royal' or the West Magazines, so far as it is ascertainable. It showed—instead of the three zones usual with these—four 'stories', like the great knobbed jars, the number of 'medallions' being 32 in place of 18.¹ It bears the same impressed single circles on its horizontal bands, but these are connected, as often those of the earlier class, by slanting lines of rope-work, and in this case the bosses themselves are surrounded by rope-work rings.

Against these archaic peculiarities may, however, be set the fact that there

¹ Two 'medallions' occur here between each handle instead of one, though the exterior handles in this case are sixteen in place of eighteen on the normal 'Medallion' *pithoi*.

was no trace of the usual M. M. III lilac-brown wash, nor of the white rosettes on the 'Medallions' themselves, which are here more bossed. On the other hand the tall, upright, proportionately narrow contour of the jar anticipates a prevailing characteristic of vessels of early L. M. I *a* date. The somewhat finely cut profile of the rim is itself common to the usual type of 'Medallion' *pithoi*. (See p. 644, Fig. 632 B.)

On the whole, in spite of the earlier traditions here represented, it seems best to regard this tall jar as contemporary with the others. It is clear, however, that it had remained continuously in use to the last palatial Age. On the upper, plastered, floor-level laid round it, 30 centimetres above its base, were remains of seven ordinary *pithoi* of a late class,¹ and in front of it had been set a shallow stone-lined receptacle like the superficial vats of the West Magazines. Between the earlier² and later floor was an accumulated deposit. The history of this vessel a good deal recalls that of the capacious jar found in the private house West of the Palace that had contained the fittings of its Snake room.³ This rested on a pavement of transitional M. M. III-L. M. I *a* date, while, at a height, in that case of 20 cm. above this and covering similar accumulations, a new floor had been laid down in L. M. II, the receptacle continuing in use.

The 'Medallion' *pithoi* of the West Magazines themselves stood on the same pavement level as the other store-jars, showing that in this case they had been transferred from earlier floors. Throughout the West Magazines there are, indeed, traces of an earlier system of pavements lying some 20-25 centimetres beneath that on which the great store-jars were found at the time of the excavation.

True
'Medal-
lion'
pithoi
trans-
ferred to
W. Maga-
zines from
M. M. III
floors.

The jars presenting the medallions thus appear—*per saltum*—side by side with the later class, the prevailing type of which fits on to a L. M. I *a* type, and on which, with only one exception, the tradition of the medallion ornament is entirely lost. The exceptional vessel referred to is reproduced on Suppl. Pl. LIX, *δ*, and displays between its four upper handles isolated and diminutive ringed bosses that are merely distant survivals of true 'Medallions'. The whole build of this *pithos* and its degraded decoration of unevenly curving ropework, indicates a distinctly later date.⁴

Degraded
out-
growths.

¹ Above the upper floor was found a Late Minoan lamp-stand of purple gypsum and a painted stirrup-vase.

² On the original floor here were found numerous 'blades' or knife-like flakes of obsidian or volcanic glass, with only one ex-

ception broken. This points to the partial use of the chamber as a barber's shop.

³ See above, Pt. I, p. 140.

⁴ It is just possible, indeed, that this vessel may represent a very late element from an earlier floor. The general shape with the four

Steatite
'medal-
lion'
pithoi of
'Atreus'

An interesting point about this late version of a 'Medallion' *pithos* is the hatched decoration of its horizontal bands. These are in each case arranged in three rows; with the incised lines sloping in alternate direc-



FIG. 623. PLAIT-WORK DECORATION (IMITATION OF BEATEN BANDS) ON M. M. III *a* LIMESTONE VASE.

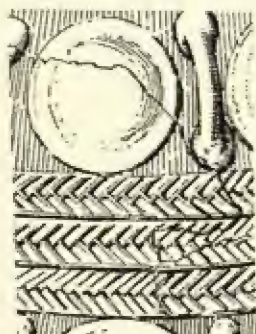


FIG. 624. SECTION OF STEATITE *PITHOS*, 'ATREUS' TOMB, MYCENAE.



FIG. 625 *a*. BASE OF *PITHOS* 12 OF MAGAZINE V WITH FLUTINGS AND PLAIT-WORK BAND.



FIG. 625 *b*. SECTION OF LATE 'MEDALLION' *PITHOS* SHOWING DEGRADATION OF PLAIT-WORK BANDS.

Tomb:
plait-work
on them a
Knossian
tradition.

tions (see Fig. 625, *b*) so that any two of them set together form a 'herring-bone' pattern. Double rows of inclined striations forming this pattern are, indeed, frequent on the later *pithoi* of the Magazines, and the origin of this recurring pattern from a simple plait-work band is made clear by the actual appearance of this on a jar—No. 12 of Magazine V—of good fabric showing curved flutings of early tradition round its base (Fig. 625, *a*).¹

handles above and two near the base conforms, however, to a recurring later type. But the contour of the upper rim approaches that of

'medallion' *pithoi*.

¹ This *pithos* closely resembles in details of its fabric, such as the profile of the rim and

The repeated 'herring-bone' bands on the late 'Medallion' *pithos* (Fig. 625, *b*) point, therefore, to plait-work zones of this kind on earlier *pithoi* of the same class. None are to be found on the existing clay specimens, but the *lacuna* is filled by those in green steatite from the 'Atreus' Tomb at Mycenae, a section of one of which is reproduced in Fig. 624.¹ The horizontal bands on this consist of three rows of plain plait-work.

We have here an additional indication that these finely carved jars of green Cretan steatite had, at one time, reposed on an early floor of the Royal cellars of Knossos, side by side with the stately 'Medallion' *pithoi* of painted clay. Nowhere else, in fact, but in the Great Palace, have remains of clay store-jars of this type been brought to light. It will also be recalled that a type of ewer, executed in more than one stone, with plait-work decoration on the body, is a special characteristic at Knossos of the earlier phase of the Third Middle Minoan Period. (See Fig. 623.)²

The Late Minoan *Pithoi* of the Normal Class.

The normal arrangement of the later jars shows an upper zone of four handles beneath the rim, and another, either of two or four handles connected with a rope-work band at about a fifth of the total height of the *pithos* above its base. This in itself is of very early tradition, and answers to the scheme that already appears on some of the painted jars of the early Magazines at Phaestos³ of M. M. II date. As already demonstrated,⁴ this arrangement of an upper and lower row of handles preserves an interesting record of the process by which this class of large pots were evolved. The starting-point was a mere bowl with either one or two handles on its rim. On this, in order to increase the vessel's capacity, a high collar was built up like a second story, and its upper circuit in turn provided with handles of its own. At a still earlier stage the process is illustrated by basketry.⁵

It will be seen⁶ that this 'two-storied' class of pots finds wide analogies not only among Mainland 'Helladic' forms, but among the late Bronze and early Iron Age ceramic types on the Italian side, as at Crespellano and in the well-known Villanovan urns.

the well-modelled handles, that with the foliated zone below, reproduced in Fig. 625, *b*. This latter decoration is a reflection of painted vases in the L. M. I *a* style.

¹ See above, pp. 231, 232.

² Cf. *P. of M.*, i, p. 412, and Fig. 296, and cf. p. 229, Fig. 176, above.

³ L. Pernier, *Mon. Ant.*, xiv, Pl. XXXIV *b*.

In other cases there are six or more handles in the upper zone.

⁴ *P. of M.*, ii, Pt. II, p. 428 seqq. and Figs. 249, 250.

⁵ E.g. the suspension basket from Kordofan, Suppl. Pl. LX (see below, pp. 645, 646).

⁶ *P. of M.*, ii, Pt. II, p. 429, Fig. 250.

Normal
pithoi of
latest
phase.

M. M. III
proto-
types of
normal
pithoi of
L. M. II
class.

Among Minoan *pithoi* the predominant late type of the West Magazines, with its upper and lower tier of handles, goes back to a more elongated and upright class—the fabric of which may be said to consist of three or four ‘stories’—showing traces of ‘drip’ ornament, that had come into vogue with the closing phase (b) of M. M. III.

A good specimen, reproduced in Fig. 626, occurred on a slightly higher floor-level in the North-East Magazine at Knossos,¹ and another similar in the Sixth Magazine of the ‘North-East House’ there.² In the latter case a sealing was found by the jar incised with signs of the linear Class A, and accompanied by a pictorial representation of a lion’s head ‘rhyton’, as well as by a seal impression of the façade type, showing a house window. Similar *pithoi* recurred in the Magazines of the largest house at Tylissos,³ where the painted pottery indicated that their use had survived well into the earlier phase (a) of L. M. I.

The walls of this extremely elongated type of *pithos* are still striped with



FIG. 626. M. M. III b, PITHOS FROM NORTH-EAST MAGAZINES.

¹ *P. of M.*, ii, Pt. II, p. 419, Fig. 241 a.

² Cf. *ibid.*, p. 420 and Fig. 242.

³ I. Hatzidakis, *Τοις Μινωικῇ*, p. 201 seqq. and Figs. 3 and 4.

the 'drip' ornament of M. M. III, and the rope decoration appears in bold relief as on the more archaic M. M. II class.

In Magazines of the last palatial Age at Phaestos, however, as at Hagia Triada, a less elongated and more shapely type of store-jar makes its appearance. On these, while the arrangement of an upper and lower tier of handles remains unchanged, the rope-work decoration is no longer executed in full relief but as flat bands, either horizontal or curving, the surface of which is scored by fine incised lines (Fig. 627). In this and in other cases graffito inscriptions of the Linear Class A appear on these vessels, and the last associations of their floor-levels belong to the beginning at least of the maturer phase (*β*) of L. M. I.

L. M. I *β*
inscribed
pithoi of
Phaestos.

In the West Magazines at Knossos no examples occurred of this particular class of *pithoi*. The flat bands, however, especially in horizontal positions, are of frequent occurrence, sometimes with similar upright striations. On the other hand, certain features of the flat bands of the Knossian group, such as the repeated C's¹ and the impressed circles, like those of the 'Medallion' *pithoi*,² can be shown to be a direct inheritance from M. M. III. Altogether the evidence points to an overlapping of this group and the Phaestos type shown in Fig. 627.

Influence of L. M. I Painted Designs on *Pithoi*: Plant Decoration.

A *terminus ad quem* for the *pithoi* of the West Magazines is, of course, supplied by the abundant remains of painted jars and amphoras found with them, and representing the last ceramic element—L. M. II—on the upper floors, from which they were precipitated at the time of the final catastrophe.

Influence
of L. M. I
painted
designs on
normal
pithoi of
the late
class.

What, however, was the higher limit?

For the continuous history of this late Palace section the data supplied by the debris of the South-West angle of the building beyond, which fitted on to the area of the West Magazines, form a useful supplement.³ Here, in a deposit, marking the former existence of a votive centre at this corner, and containing abundant fragments of L. M. II pedestalled goblets, was found, in addition to further amphoras of the L. M. II class, a fine specimen illustrating the 'marine' style of L. M. I *β*,⁴ though it was otherwise closely related to the 'octopus' series of the 'Palace style' jars. The remains here also contained various characteristic fragments of L. M. I *β* goblets.⁵ It is

¹ These are derived from the overlapping 'ears' to which rope-work is seen reduced on M. M. III pottery. (See *P. of M.*, ii, Pt. II, p. 418, Fig. 241 A.)

² E.g. p. 634, Fig. 622.

³ See above, Pt. I, p. 359 seqq.

⁴ See above, Pt. I, p. 280, Fig. 215.

⁵ See above, p. 361, Fig. 301 a-f.

a fair conclusion that, apart from some repainting in the latest days of the building, the West Magazines as found date at least from L. M. I *b* and may even overlap the close of L. M. I *a*.



FIG. 627. L. M. I *b* *PITHOS* INSCRIBED WITH LINEAR SCRIPT A. PHAESTOS.



FIG. 628. *PITHOS* (No. 10 OF MAGAZINE V) WITH LEAFY SPRAY ROUND FOOT.

Plant
designs in
rope-
work.

This conclusion is confirmed by certain reflections of plant motives peculiar to painted jars of the mature L. M. I *a* phase traceable in the decoration of the *pithoi* contained by other Magazines. The continuous leafy spray round the foot of the jar, Fig. 628,¹ recalls those that recur on the painted 'pithoid jars' of the L. M. I *a* class.²

¹ Cf. too, Suppl. Pl. LIX, a, 4.

² See *P. of M.*, ii, Pt. II, p. 423, Figs. 244,

245. In these cases the leafy band is above the lower tier of handles.



FIG. 529. *PITHOS* ON HIGHER LEVEL BESIDE 'KASELLES' IN MAGAZINE IV WITH PLANT DECORATION IN RELIEF.

The plant designs on the most decorative of our *pithoi*, Fig. 629¹—shown as it stands in Magazine IV—recall at once certain aspects of the date-palm motive as seen in L. M. I *b* vases² as well as the papyrus groups, both of these and of the painted jars and amphoras of the 'Palace style'. The absence, however, of side coils, and, in the second case, of a central flower, suggests a nearer relation to the simple reed tufts such as are seen between the Double Axes on the large painted jar from the 'North-West Sanctuary'.³ The sprays on the similar *pithos* of Magazine XI must be regarded as an inferior variant of those illustrated by Fig. 629. Both the rope ornament and the horizontal bands of this jar show the incised C's, derived from overlapping 'ears' of clay, of which bands are moulded on M. M. III jars.⁴

Further Motives derived from Vase Painting: Looped Ornament and 'Adder Mark'.

Pendant
loop
ornament

Another derivative of Late Minoan painted decoration on vases may be recognized in the pendant loops seen in bold relief between the handles of the *pithos* in Suppl. Pl. LVII, *b*, from the Ninth Magazine.⁵ These recall the double banded festoons—distinct from the beaded form reminiscent of the Ladies in Blue—that is often seen beneath the rim of painted vessels of the latest palatial Age or the immediately succeeding epoch, as for instance on a stirrup-vase from Grave I of the Zafer Papoura Cemetery, Fig. 630.⁶

Sacral
'Adder-
mark' in
rope-
work.

It will be further noted that the rope-work in the lower zone of the looped *pithos* (Suppl. Pl. LVII, *b*) is no longer simply undulating, but imitates in fact the



FIG. 630. STIRRUP VASE WITH FESTOON ORNAMENT: GRAVE I: ZAFER PAPOURA.

¹ The impressed rings with central boss on the rim and handles of this *pithos* are also a distinctive feature.

² E.g. *P. of M.*, ii, Pt. II, p. 496, Fig. 301, *r*.

³ This *ex hypothesi* overlay Magazines XI–XIII. See above, p. 343, Fig. 285, *a*, *b*.

⁴ See above, p. 639, n. 1.

⁵ No. 17. The height of this jar is 1.24

metre and the outer width of its upper margin 0.71 cm. The section of the rim is somewhat square in outline.

⁶ A. E., *Tombs of Knossos*, i, p. 22, Fig. 14 (*Archaeologia*, LIX: 1906, Tomb I). This stirrup-vase should be referred to the borders of L. M. II *b* or L. M. III *a*.

crested wave outlines of the familiar sacral motive of Minoan Art, which, as demonstrated in detail in a former Section,¹ can be clearly traced to the 'Adder Mark' of the Goddess.

This conclusion is confirmed by the still more definite reproduction of this motive—as usual in the later versions without the dot or dash—on two of the flat bands of the *pithos*, Suppl. Pl. LVIII.² In a more angular form this motive can be traced on the bands of some other *pithoi* of the Magazines, as well as on a somewhat later specimen found in the South Propylaeum. This dotless form of the sacral wave motive answers in vase painting to the latest phase of the Palace style³ and the early part of L. M. III.

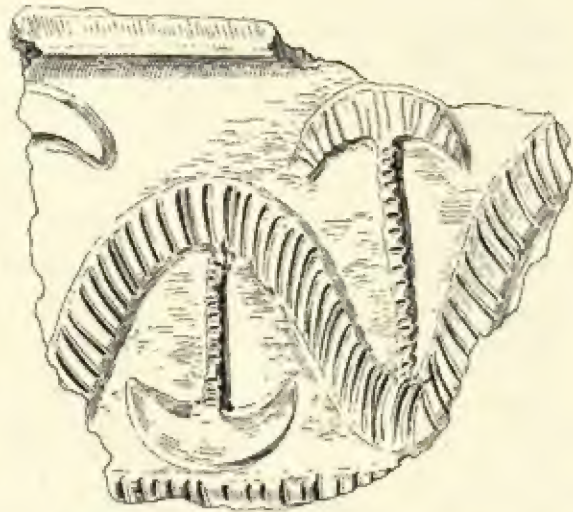


FIG. 631. FRAGMENT OF *PITHOS* WITH IMPLEMENTS IN RELIEF.

In connexion with the appearance of this religious ornament on the *pithoi* may be cited the fragment of one—found outside the section of the building containing the Magazines—here reproduced in Fig. 631. The objects rising above and below the curves of the rope-work might at first sight be taken for some kind of tool. The flat curving ends of the blades, however, in spite of the attenuation of their attachments, make it probable that they are conventional derivatives from the blades of the sacred weapon.

Typical L. M. II *Pithoi*.

The most usual type of *pithos* is that in which the zones between the horizontal bands are simply decorated with undulating lines of imitation rope. A typical specimen from the Third Magazine is to be seen in the British Museum,⁴ and a good example is given below in Fig. 634, from just inside the entrance of the Twelfth Magazine.

Typical
L. M. II
pithoi.

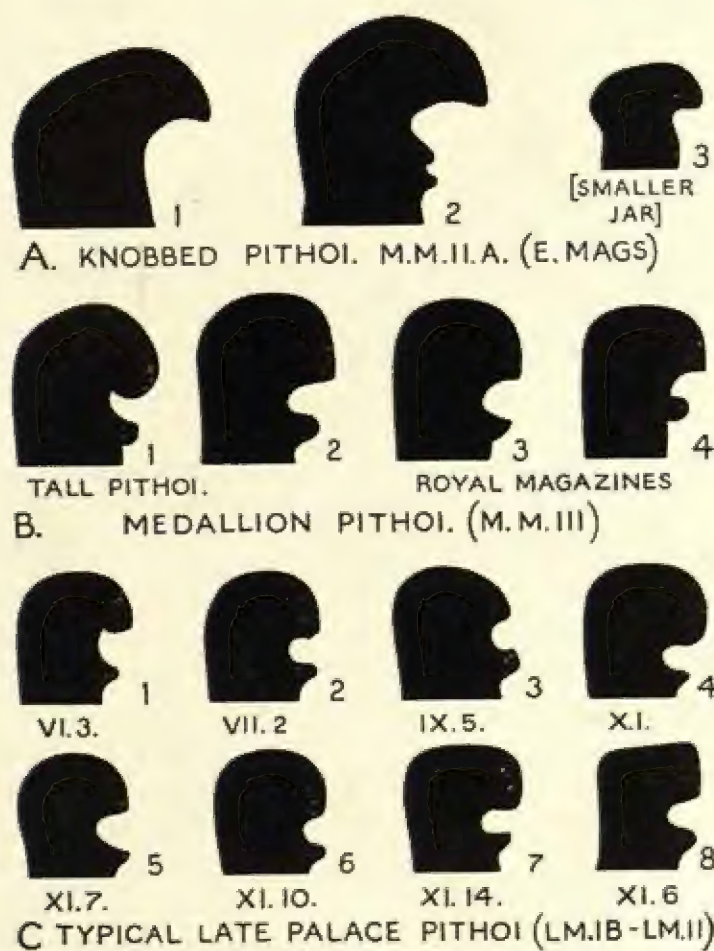
¹ See above, p. 178 seqq.

² No. 3 of Magazine VI. Height 1.20 metre; outer diameter of rim 0.69 cm. The rim of this jar has a well-modelled profile.

³ See, for instance, the upper margin of
IV**

the clay sarcophagus, p. 330, Fig. 272, *a*, above.

⁴ Presented by Mr. Minos Kalochaerinos, and obtained by him in 1878 from that area. (See A. E., *Knossos*, Report, 1900, p. 21.)

FIG. 632. PROFILES OF RIMS OF *PITHOI*: M. M. II a-L. M. II.

The horizontal bands of this normal class showed a variety of incised hatching, and, at times, impressed circles. The 'her-ring-bone' pattern that often occurs on them is, as already noticed in the case of a late 'Medallion' *pithos*, taken over from another source, and ultimately, as we have seen,¹ connects itself with plait-work patterns that appear on M. M. III a stone vases. The *pithos*, Suppl. Pl. LVIII, with the incised 'Adder Mark' affords a good example of this late class.

Profiles of Rims of *Pithoi* M. M. II a to L. M. II.

Rim profiles of *pithoi*.

The Comparative Table, Fig. 632, shows a selection of the rim profiles in three successive classes of the great store-jars. The first category, A, representing the great knobbed *pithoi* (M. M. II a), shows a simple flare (A 1),

Besides part of the Third Magazine, a small adjoining section of the Long Gallery was also dug into as well as of the adjoining passage, afterwards named the 'Corridor of the House Tablets'. What fragments of tablets

were brought out on this occasion were, however, thrown into a rubbish heap from which they were recovered through a careful sifting of the earth deposit in 1900.

¹ See above, p. 636, Figs. 623-5.

supplemented in 2 by a bifid ridge below. B, exemplifying the 'Medallion' group, shows a compacter and more elegant outline, in the case of B 1 overlapping the underlying ridge. The normal rim of the later series (C), as seen in the West Magazines, is moulded much as those of B, but some later examples are marked by a flattening of the top, a feature to be also found later in the case of what is probably a store-jar of the Re-occupation period found on a late floor level of the South Propylaeum.

The average height of thirty typical specimens of these ordinary late Palace *pithoi* is 1.30 metre, and the exterior breadth of their rims 68 centimetres. The mouths of these jars were thus slightly wider than half their height.

'Bottle-shaped' Class of Jars derived from Basketry.

Side by side with this normal type there is another distinct series, the contours and decoration of which point to the influence of a different class of models. Although approximately of the same height as the other, a noticeable feature of these jars is their proportionately narrower neck and rim, which gives them a bottle-like appearance. The outer margin of the mouth is, in this case, about a third of the height instead of half of it as in the other series. The width of the neck is in some cases little more than a quarter of the height of the vessel. The bodies form an elongated oval; the waving rope ornament is absent from the horizontal interspaces of their zones, and they are surrounded by numerous slightly relieved bands with hatched surfaces, sometimes presenting the 'herring-bone' pattern.

Bottle-shaped jars derived from basketry.

A good example is given in Suppl. Pl. LVII *a*,¹ and a similar *pithos* is seen in position to the left of the entrance of Magazine IX in Fig. 633.²

The handles near the base and above the shoulders on jars of this class conform to those of the normal *pithoi*, but, apart from this, the whole appearance is best explained by basketry models. In this case, and more notably in the more open-mouthed type, Suppl. Pl. LIX *c*, 2, we find the best analogy on the African side. In Kordofan—between the Libyan Desert

¹ Height 1.28 metre; outer rim 47 cm. in diam.

² It is numbered 1 in Fig. 633. Its height is 1.42 metre: the diameter of the rim 42 cm. A similar vessel, No. 13 of Mag. IX, is 1.44 metre high with a rim diameter

of 42 cm. (Its base is 25 cm. in diameter.) These proportions will be seen to be widely divergent from those of the normal *pithoi* of the Magazines, though their height is about the same—about a third the height instead of half.

and the Upper Nile—receptacles of basket-work of much the same shape



FIG. 633. ENTRANCE SECTION OF MAGAZINE IX, WITH PILLAR SUPPORTING COLUMN-BASE OF HALL ABOVE AND 'KASELLES' (PROVISIONALLY COVERED BY SLABS). THIS MAGAZINE IS NOW ROOFED OVER.

as the store-jars with which we are concerned are used as milk churns, and are hung up on branches. A specimen from the Pitt Rivers Museum from the Bagarra district is shown in the Suppl. Pl. LX.¹ Being made

¹ Its height is 58 cm., the outer rim being 25 cm. in diameter, from a photograph kindly

for suspension the bottom in this case is rounded off, and decorative tassels are attached.

Here an interesting feature in the fabric is the strengthening of the upper 'story' with bands consisting of narrow strips of hide. This strengthening with leather-work is interesting, since the raised bands and herring-bone plait-work that appear above and below these round the Minoan *pithoi* have been shown to be the outgrowth of a leather pattern, clearly originating—as in the case of stone vases of early M. M. III date—in plaited leather strips.¹

Numbers and Arrangement of *Pithoi*: Total Capacity of Oil Storage in West Magazines.

Including bases found in position, evidence was forthcoming of the existence of 151 *pithoi* standing in their places at the time of excavation. In this amount are reckoned 12 previously extracted from Magazine III, and 11 from the Long Corridor, which had also largely served as a repository of oil jars arranged along its East Wall and outside the entrance jambs of the Magazines. There was fragmentary evidence of many more.

Number of *pithoi* as ascertained in position.

It must be borne in mind, moreover, that in many cases the great jars had been cleared out of the Magazines by the grubbers after treasure, who had frequently broken into the older cists beneath the pavements. Thus, in Magazine VII only a single *pithos* came to light, and in VIII and X, in each case, not more than five.

The Magazines in which these great jars had stood formed a continuous series from the Third to the Thirteenth inclusive, or eleven in all. There was no evidence of such storage either in the Southernmost Group, A-c and 1, 2, or in the Northern Section, embracing Magazines XIV to XVIII, and forming an area apart.

The Magazines themselves fell into four groups according to their dimensions. Those of the Northern section (in which no jars occurred) were about 10.50 metres in the length of their interior; Nos. III-V, 13 metres; VI to X, under the N.W. Pillar Hall, c. 14.20 metres, and XI-XIII 18.50 metres. The long narrow Magazines XI and XII were, as will be seen from Suppl. Pl. LXI, completely packed with *pithoi* in single rows. The existing evidence shows that there was room in

Groups of Magazines according to dimensions.

supplied me by the Curator, Mr. Henry Balfour. Such vessels were provided with basket-work covers. The *pithoi* themselves may have been covered with wooden disks.

¹ See especially *P. of M.*, i, Fig. 296, (p. 412) where the plait-work is certainly copied from leather bands.

Nos. III-V for about 30 store-jars, or 90 in all; in Nos. VI-X for 40, making 290 in all, while in each of the longest group, Nos. XI-XIII, where the *pithoi* stood only against the right walls—as shown in Suppl. Pl. LXI—there was place for 28, totalling 84 jars.

The Magazines themselves were therefore constructed to contain about 374, while the standing room in the Long Corridor could have accommodated 46 more.

Designed
to contain
420 *pithoi*:
estimate
of oil
storage.

As many as 420 *pithoi* may thus have been stored in this area, though it is not necessary to suppose that the full number of jars was reached at any one time. The cubic contents of a *pithos* of normal type and size, 1.40 metre in height, would have amounted to about 185 litres or 40 gallons.¹ The total amount of oil storage that the West Magazines were made to accommodate would thus have been about 77,700 litres, or 16,800 gallons.

The discovery is mentioned in Volume II, of a considerable building containing rows of *pithoi*, like those of the late Palace Magazines, near the shore at the Southern port of Komò²—known to the natives as the 'Teloneion' or Custom House. Similar warehouses doubtless existed in the sea-port of Knossos.

Inter-
rupted
filling of
alabastra
from
pithos in
'Throne
Room'.

A curious indication that the contents of the *pithoi* was in fact olive oil is afforded by a discovery relating to the very moment of the final catastrophe. On the pavement of the 'Room of the Throne', close to its entrance had been set *alabastra*,³ doubtless used for anointing functions in the Lustral Area below. On its side by these lay a much crushed *pithos* of normal type that had evidently been transported here, with its contents at a somewhat low level, and from which some acolyte, who had turned it over thus for his convenience, was in the act of filling the ceremonial vessels.

Roofing over of Section of Magazines: Painted Dadoes.

Roofing
over of
Maga-
zines
VIII-X.

In order to preserve, *in situ*, the important remains of a column-base and door-jamb of the bi-columnar 'Great Hall' above, as well as for the better conservation of the *pithoi* in the Magazines below, a section of these was roofed over (including Magazines VIII-X), and the upper floor restored (see Fig. 606, above). A view of the interior of Magazine IX thus covered over,

¹ This calculation was arrived at from a typical normal example, *pithos* 10 of Mag. V (cf. too Fig. 634, opp.) by dividing its interior into the equivalent of two cylinders. One of these was 41 cm. (c. 16½ in.) in diameter and 69 cm. (c. 27 in.) in height, the other 32 cm. in diameter

(c. 12½ in.) and 69 cm. (c. 27 in.) in height. The exact figures were 184.44 litres (40.6 gallons).

² *P. of M.*, ii, Pt. I, p. 88.

³ See below, p. 939, and Coloured Plate XXXIII (Frontispiece).



FIG. 634 ENTRANCE OF MAGAZINE XII SHOWING PLASTER DECORATION OF WALL.

is given in Fig. 633, showing the lower pier of the Northern column of the Hall and the wooden beam that ran above the dado, restored in cement.

This beam would itself have been concealed by the plaster decoration of the walls which seems to have been in course of renewal here, as in a large

Remains
of painted
dadoes.

area of the Eastern section of the Palace, in the epoch—L. M. II—that preceded the final catastrophe. The best evidence of this is afforded by the entrance of Magazine XII (Fig. 634), also interesting from the fact that the lower block of its right-hand jamb is cut out of a limestone block of the Early Palace incised with the 'Window' sign. A dado band, coloured a bluish grey, occurs here at a height of 86 centimetres from the pavement followed by a Venetian red line, this system being repeated 61 centimetres above the first band. Though in this case perfectly plain, this dado scheme will be seen to answer very closely to that of the 'Room of the Throne'.

Parts of the same decoration were found covering a block of masonry on the opposite wall of the Long Corridor, and remains of similar painted stucco, in some cases smoke-stained, occurred in other Magazines¹; it is in fact evident that the system was intended to include this whole Basement Section. In several Magazines, however, the walls were found in a quite rough state, with but little remains of plastering,² and it is possible that here, as seems to have been the case in part of the East Quarter of the building,³ the process of re-decoration was in actual course of execution at the time of the final catastrophe of the Palace.

Discovery of Standard Palace Weight of One Talent.

Discovery
of
standard
weight.

Above the floor-level near the West end of the Fifteenth Magazine, and evidently fallen from an area of the upper system near the North-West Corner Entrance, was the remarkable stone weight reproduced in Fig. 635.⁴

Octopus
relief in
L. M. II
'Palace
Style'.

It is 42 centimetres ($16\frac{1}{2}$ inches) high, of the purple gypsum so much in use in the last palatial Age, and is somewhat wedge-shaped above, with a perforation 5-6 centimetres in diameter.⁵ It could thus be suspended from a rope. Upon both of its sub-triangular faces is an octopus in relief, the tentacles in each case coiling over its square-cut sides. The type of these matches that on a series of 'Palace Style' amphoras of the best period,⁶ from the overlying Hall. As compared, however, with examples of the fine Transitional Age, such as the 'ambushed' octopus on the steatite 'rhyton' of M. M. III date—a relic from an earlier treasure, brought to light in the

¹ E.g. in Mag. VI; *P. of M.*, i, p. 459, Fig. 329.

² As for instance in Mag. IX (Fig. 633, p. 646 above).

³ See *P. of M.*, iii, p. 356.

⁴ See, too, A. E., *Knossos*, Report, 1901, pp. 42, 43, and cf. my *Minoan Weights and*

Mediums of Currency (in *Corolla Numismatica*, 1906), p. 342, Fig. 1.

⁵ The object is 8 cm. wide at top gradually increasing to 27 cm. at bottom, where it is 13 cm. thick.

⁶ E.g., p. 306, Fig. 240 above.

Lustral Basin of the 'Room of the Throne'—where the coils are intertwined,¹ this is of the later class in which each tentacle is separately defined,

without any crossing. It is still somewhat early in style, however, since one arm passes behind the squid's body.

It is clearly a weight, and the tentacles coiling over the whole surface had a practical value in making it difficult, without detection, to reduce its volume. It is also probable from the frequent repetition of such cuttlefishes, both on vessels and seal-stones, that, in ancient as in modern Crete, it formed a popular article of diet, and would thus have been a prevailing element in any Minoan *olla podrida*. A fisherman holding a large octopus is seen on the 'flat cylinder' seal (Suppl. Pl. LIV, *c*). Its appearance on the weight had therefore a special appropriateness in connexion with the local market.

Weight =
a light
talent,
used in
Egypt.



FIG. 635. STANDARD TALENT WEIGHT OF PURPLE GYPSUM WITH TWO OCTOPODS IN RELIEF.

exactly 29,000 grammes shows that we have here to do with a 'light talent'

The fact that it scales

¹ *P. of M.*, ii, Pt. I, p. 227, Fig. 130, and cf. *Ibid.*, Pt. II, pp. 502, 503, and Fig. 307. This free tradition is still observed in L. M. I & painted vases, e.g. *P. of M.*, ii, Pt. II, p. 509,

Fig. 312 *c* (Gournià) and *d* (Palaikastro). On the Knossian example of this style, p. 280 above, Fig. 215, crossing tentacles still occur.

of a peculiarly Egyptian type. This answers to a somewhat low version of the Babylonian talent representing 60 *minas* of about 490 grammes. The Knossian weight would itself answer to a *mina* of 483.33 grammes.

It further appears that the Palace Standard of which we have here the

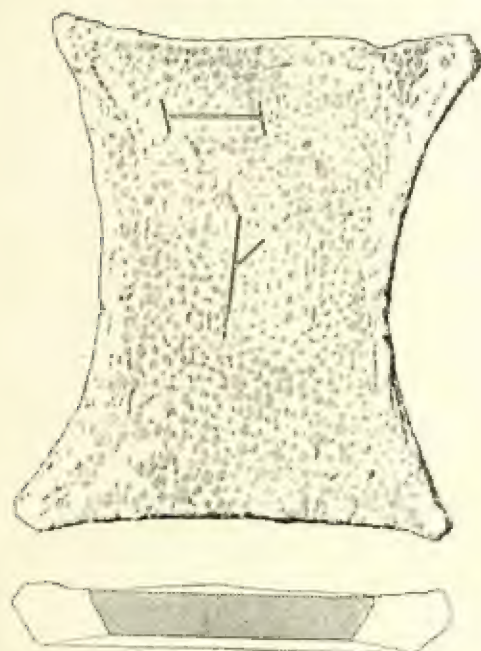


FIG. 636. COPPER INGOT FROM HAGIA TRIADA.

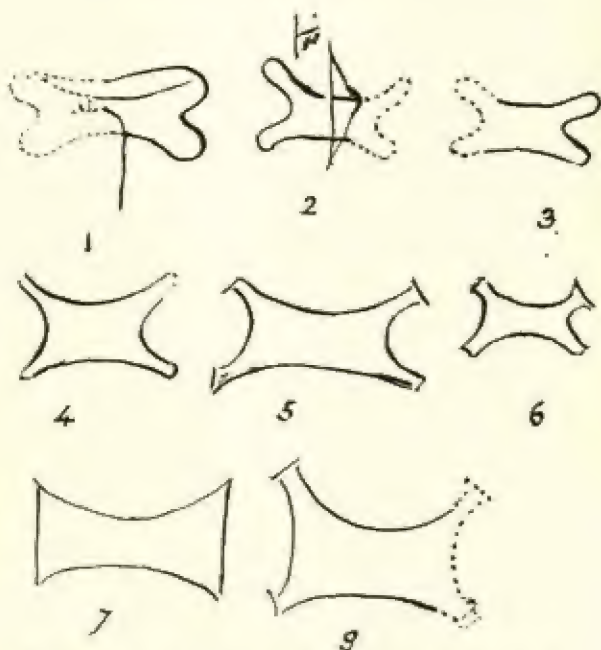


FIG. 637. INGOT SIGNS ON TABLETS OF CLASS B. KNOSSOS.

Equiva-
lent of
copper
ingots.

evidence was approximately repeated in a series of copper ingots. Nineteen of these were discovered by Professor Halbherr and the Italian Mission in 1903, carefully walled up in four basement compartments of the small Palace of Hagia Triada, five of them presenting incised signs (Fig. 636). The average weight of these ingots—which themselves do not greatly vary in weight¹—is 29,131.6 grammes, and two of them weigh exactly 29 kilograms, the amount scaled by the Palace weight from Knossos.

Ingots
signs on
Knossian
tablets of
Class B.

Ingots of the same kind have been brought to light on other Cretan sites, including Tylissos on the border of the Knossian district.² A fragment of one occurred in the Palace itself, in disturbed earth near the South end of the Long Corridor. That even in the latest Age of the Palace there

¹ J. Hatzidakis, *Τελευταῖες Μινωικὴ*, p. 221, Fig. 31. (Weight not given.) Other similar finds are recorded at Palaikastro and Mochlos.

² *P. of M.*, ii, Pt. II, p. 535, Fig. 339 and p. 740, Fig. 473.

were considerable deposits of these in its Treasuries is itself made evident by the recurrence of the ingot signs on the clay tablets of Class B (Fig. 637). The similar ingots borne by the tribute-bearing chieftains of Keftiu as depicted in the Tomb of Rekhmara have already received illustration.¹

It is clear, indeed, that this form of ingot, with its sides incurved to facilitate portage, had a widespread currency in the Ancient World beyond the sphere of Minoan enterprise. The large hoard of these found at Serra Ilixi in Sardinia with inscribed signs had possibly a Cretan connexion, and those found in Cyprus still come within the Minoan range. But they are also seen borne as tribute by Syrians and Nubians. The material of one of the Hagia Triada specimens analysed by Professor Mosso was nearly 99 per cent. pure copper.

Similar ingot borne by envoys from Keftiu.

From the repeated cancellation on the 'Chariot Tablets', illustrated below, of the 'cuirass', as part of knight's equipment, and the substitution of the 'ingot' sign,² it would appear that a copper talent was regarded as its proper equivalent.

Disk-shaped Weights from Knossos: of Egyptian Gold Standard.

Numerous examples of smaller weights were discovered belonging to the late palatial period. The typical shape was a disk, with sides in some cases slightly rounded off, and the materials were dark steatite, limestone, alabaster and, occasionally, lead. In many cases these were engraved with circular signs of numeration, and it has thus been possible to place together a consecutive series as shown in Fig. 638.

Late palatial disk-shaped weights.

The larger of these, Fig. 638, *a*, of black steatite, found with a late Palatial lamp of the same material, N.E. of the Palace, is exceptionally marked with two larger circles, which, as the decimal system was in vogue, may in each case stand for ten of the units, represented here by four of the ordinary small circles $\circ\circ\circ\circ$. It would therefore be equivalent to 24 units. The weight, as corrected to its full original volume,³ scales 1,567.47 grammes. Its diameter is 11.5 cm. and height 6.5.

Numbered and graduated series answering to Egyptian units.

¹ *P. of M.*, ii, Pt. II, p. 740, Fig. 473 *c, f*.

² See below, p. 805 and Fig. 784.

³ In order to recover the original weight of chipped or partially defective weights I have resorted to a simple process. A cast of the imperfect weight is first made in plaster of Paris and the weight of this taken. The

plaster cast is then made up to reproduce its original contour and the weight of this restored cast taken. The whole calculation is thus reduced to a simple proportion sum. As the imperfect plaster weight is to the perfect so is the defective stone (or metal) weight to the same in its original condition.

Divided by 24, this gives a unit of almost exactly 65.5 grammes (*c.* 1,008 grains). The unit thus arrived at represents 5 Egyptian gold units of *c.* 13 grammes (= 65 grammes). This is 10 Egyptian $\frac{1}{2}$ units of



FIG. 638. GRADUATED STONE WEIGHTS FROM KNOSSOS IN SHAPE OF FLAT DISKS.

6.5 grammes, the half being often used for calculation—the *drachm* as opposed to the *stater*.¹

Next in gradation is the weight *b*, of the same black steatite material, and also found in a late Palatial deposit.² Five of the smaller circles are here engraved $\circ\circ\circ$, representing similar 5 half units of 6.5 grammes. The diameter of this weight is 8.2 cm., and its height 2.9.

The next weight *c*, of white limestone, found with the preceding, presents 4 small engraved circles $\circ\circ$, pointing to a unit of a little over 68 grammes. This answers to 5 Egyptian units of the somewhat full weight of 13.67 grammes. The diameter of this is 6.6 cm., and height 3.1.

¹ For more detailed metrological results I must again refer to my *Minoan Weights and* (*Corolla Numismatica*)

Mediums of Currency. (See p. 343 seqq. of ² *Op. cit.*, p. 345. The original weight (as corrected) was 327.02 grammes.

Finally, the small flat weight of coarse alabaster found above the floor-level of the East Magazines has a single small ring on its upper surface showing that it represents a unit. Its original weight was 5.92 grammes.¹

One flat disk of fine alabaster from the Palace site, marked with two small circles, scaling 8.54 grammes, belongs to a different system, and clearly answers to a light-weight Babylonian shekel, and a leaden weight of the same shape, of 8.45 grammes, must be classed with this.² Otherwise the correspondence of weights of this group, found in a late palatial association—as evidenced by the numbers they bear and the original amount scaled by them—with the Egyptian gold units,³ may be regarded as conclusively established. This might in itself be expected from the close commercial relations in which Crete at this time stood to Egypt, so well illustrated in the tombs of the Viziers of Thothmes III and his immediate successors by the envoys of Kestiu and their offerings. A remarkable discovery, however, described below,⁴ now shows that the Egyptian gold unit was known in Crete by the very beginning of the Middle Minoan Age.

Other disk-shaped weights answering to light Babylonian standard.

Equations with Egyptian gold units.

Amongst other forms of Minoan weights may be mentioned a bronze ox-head—found in a Late Minoan association of the votive stratum of the

Bronze Ox-head weight.



FIG. 639. BRONZE OX-HEAD WEIGHT FILLED WITH LEAD. DIKTAEAN CAVE. ($\frac{1}{2}$)

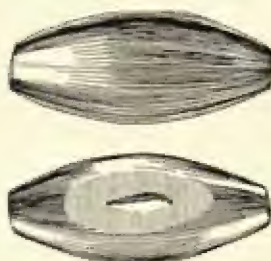


FIG. 640. SPHENDONOID WEIGHT OF HAEMATITE. KNOSSOS. ($\frac{1}{2}$)

Diktaean Cave⁵—weighing 73.62 grammes (1,136.5 grains), Fig. 639, apparently representing 8 *kedets* of 9.2025 grammes. Like an Egyptian example of the same form from Tell-el-Amarna, it is filled with lead.⁶

A haematite example of the well-known 'sphen-donoid' class⁷—like sling bullets slightly cut away on

'Sphen-donoid' weight of Haematite.

the side to enable them to stand—was found on a floor of a basement

¹ One of Professor Petrie's Egyptian weights gives a half gold unit of 6.095 grammes. Its diameter is 4.55 cm.; height 1.55.

² See *op. cit.*, pp. 347, 348.

³ For the Egyptian gold units and corresponding weights—which go back to the earliest dynasties and, apparently to pre-historic times—see especially A. E. Weigall, *Some Egyptian weights in Prof. Petrie's*

Collection (*Proc. Soc. Bibl. Arch.*, xxii, 1901, p. 378 seqq.).

⁴ p. 665, at end of Section.

⁵ Obtained by me in 1897.

⁶ Weigall, *op. cit.*, p. 387, No. 7076 and Pl. V. The original weight was c. 86.75 grammes (c. 1,350 grains).

⁷ In Egypt stone weights of this class go back to the early dynasties.

room on the South front of the Palace. It lay beneath a wall of the Re-occupation Period (Fig. 640), and its affinities must be sought in examples in the same material from L. M. III tombs at Enkomi. It weighs 12.6 grammes (195.5 grains), and apparently represents a somewhat low Egyptian gold unit.

The 'Balance' Sign on an Early Libation Bowl from Knossos.

Its early
occurrence on

The earliest Minoan representation of the balance sign occurs in an inscription incised on a section of a shallow-cupped stone vessel, evidently

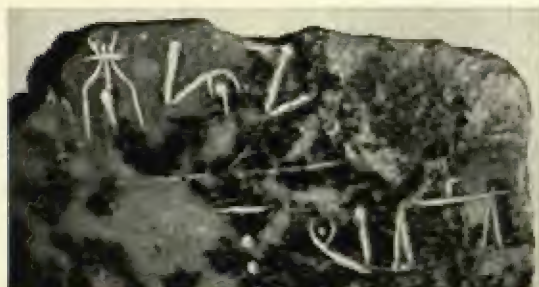



FIG. 641. INSCRIBED LIBATION BOWL OF BASIC ROCK WITH CALCITE FROM N. OF PALACE SITE, KNOSSOS: RESTORED SECTION. HEIGHT 6 CM.; WIDTH 12 CM.; DEPTH OF BOWL 2 CM. ($\frac{1}{2}$)



FIG. 642. INSCRIPTION OF CLASS A ON STEATITE LIBATION VESSEL OF CYLINDRICAL FORM FROM APODOULOU. ($\frac{1}{2}$) (PHOTO. BY DR. MARINATOS.)

Inscribed
Knossian
Libation
Bowl.

designed for libations or other offerings, found in a field North of the Palace site at Knossos and hitherto unpublished (Fig. 641). The material itself is a fine-grained basic rock with calcite, while the disproportionately shallow basin is often seen in the case of Cretan offertory vessels.

Amongst all dedicatory inscriptions engraved on such stone vessels the present example may be said to show the most archaic characteristics. Certain features would link it with the Hieroglyphic Class, but it fits on nevertheless to the known series of such dedications belonging to the Linear Class A. The two initial characters, apparently the same repeated, recall the second sign of the Psychro Libation Table. A new ideographic 'rebus' is presented by the raised bird's leg of the first register holding a peg-like object which somewhat recalls the  sign of the B script.¹ The general character of this composite ideogram recalls an early Egyptian hieroglyph in which a small pyramid appears beneath the

¹ For this compound sign see, too, p. 678 below, Fig. 661, No. 5.

open claws of a crane's leg.¹ So, too, except for the ball-like object grasped in the hand, the bent arm of line 2 both recalls a Cretan hieroglyphic type,² and also bears evidence of a survival of the 'boustrophêdon' arrangement

Boustrophêdon
inscription.

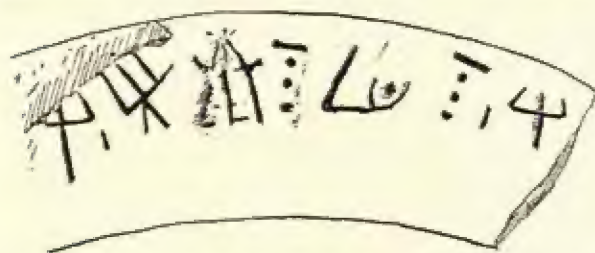


FIG. 643. PART OF AN INSCRIPTION OF CLASS A ON HIGH STEATITE LIBATION BOWL FROM PETSOFA. (2)

of the other series. In contradistinction to the bird's leg of the upper register, it is turned to the left.

That, in fact, the bent arm comes after the 'balance' sign receives striking confirmation from an inscription of the same dedicatory class, engraved on the side of a

Bent arm:
offertory
sign.

steatite cup with perforated base, found recently at Apodoulou on a South-Eastern foot-hill of Mount Ida (Fig. 642).³ In this case, where the two lines of the inscription both follow the normal, left to right direction, the same sign of the bent arm holding a ball is succeeded, as on the Knossos bowl, by a form of 'drop' sign which, in cognate varieties, is well known to both classes of the Linear Script.⁴ A similar 'drop' sign recurs on the upper margin of a section of a high steatite libation bowl from Petsofa, near Palaikastro (Fig. 643),⁵ and a re-examination of the remains of the inscription has brought out the interesting fact that there, too, it is preceded by the bent arm and 'ball', running, as normally, from left to right. In Fig. 642 it is followed by the facing 'cat's head', a religious symbol.

¹ The sign indicates 'inundation'. The shape of the character seen on the Knossos bowl clearly suggests a bird's leg.

² A. E., *Scripta Minoa*, i, p. 183, No. 7.


³ Copied there by Mr. J. Pendlebury in 1933.

Dr. Sp. Marinatos, who called attention to the object, has kindly sent me a photograph, supplemented by others giving the results of his recent excavation there. These include a bull's head 'rhyton', part of



another, square libation vessel (inscribed), and a further portion of Fig. 642 (*inset*).

⁴ See Table below, Fig. 666, opp. p. 684, B 41.

⁵ Bosanquet and Dawkins, *Unpublished Objects from the Palaikastro Excavations, 1902-6*, Part I, p. 142, No. 2. The formula of dedication closely corresponds with that of the Apodoulou Cup. Its first four characters, conventionally rendered, are repeated in the Apodoulou inscription (see Fig. 642 and inset) followed by the 'feline head' (Fig. 659, p. 677, No. 40). In the first case the mark of division is a simple dot, in the second a short upright stroke. It seems probable that in the case of the Palaikastro vessel the first character preserved was preceded by the 'drop' sign *a*; and the same collocation recurs on another libation vessel from that site. The 'hand' and  are also coupled on the Psychro Libation Table.'

The conclusion that the 'drop' sign in its variant forms originated in a 'rain' pictograph had long since suggested itself to me, and its recurrence in a series of libation vessels may well indicate that it could be used in the sense of pouring. Its connexion with the figure of the hand held forward and grasping some offertory object is itself most significant.

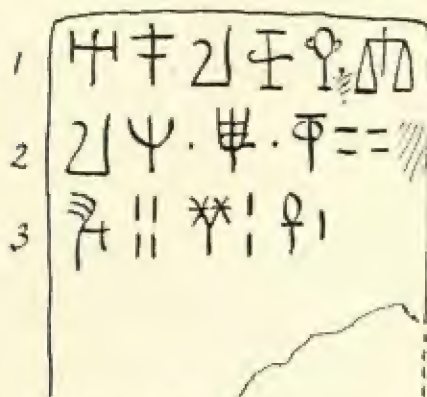


FIG. 644. TRANSCRIPT FROM H. TRIADA TABLET SHOWING 'BALANCE' SIGN.

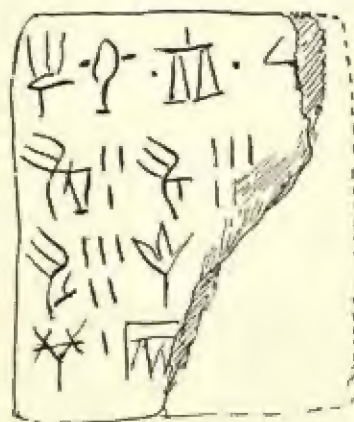



FIG. 645. TRANSCRIPT FROM H. TRIADA TABLET WITH 'BALANCE' SIGN.

'Scales' here, presumably, determinative of Stewardship.

It would appear that on the offertory bowl from Knossos the 'balance' sign, which in other cases is followed by numbers, stands at the end of a group and may rather refer to a title of some steward or Treasury official.

This interpretation, moreover, is supported by two tablets from Hagia Triada, where in each case the 'balance' sign appears, unconnected with numbers, after what there is good reason to regard as a personal name. In both cases (Figs. 644, 645)¹ the preceding sign group is the first of the inscription and terminates in the 'facing head' sign , from which in Fig. 645 it is separated by a punctuation. This character is also found repeated in an isolated position, and is clearly connected with persons. Here, too, the 'balance' may be taken as a determinative indicating that the individual referred to was some kind of accountant.

Steward holding scales, on Cypro-Minoan vase.

This earliest representation of the 'scales' or 'balance' as seen on a Minoan vessel of offering in this way finds a curious comparison with the very latest. On a painted Cypro-Minoan 'krater' recently brought to light by the Swedish excavators at Enkomi (Salamis)—Fig. 646—in connexion with one of the usual chariot scenes (themselves taken over from Cretan sarco-

¹ Both tablets relate to vegetable products. On Fig. 644, l. 3, we see the 'olive tree' sign; on Fig. 645, l. 3 the 'saffron'.

phagi of the preceding Age¹), there appear two attendant figures respectively representing, we may suppose, the deceased's household in its sporting

Cypro-Minoan Vase.

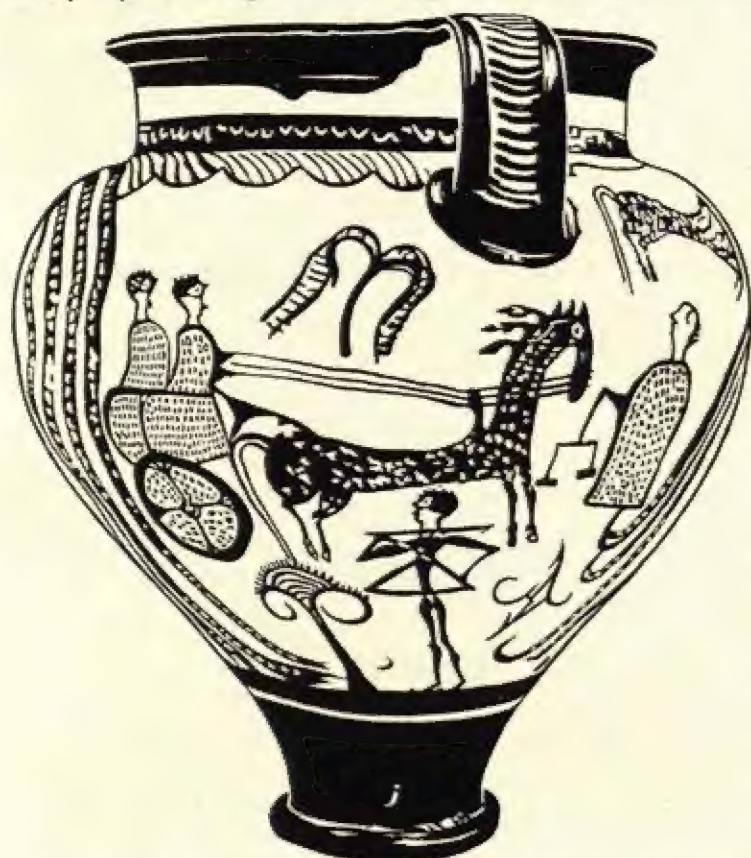


FIG. 646. CYPRO-MINOAN 'KRATER' FROM ENKOMI SWEDISH EXCAVATIONS.

or military and its economic aspect. Beneath the horses stands a 'squire', in the shape of a bare-limbed youth holding a bow in one hand and an arrow in the other, while in front, clad in the gaberdine of Syrian fashion, is another person holding up a balance, a natural emblem of stewardship.²

As an Egyptian hieroglyph the 'balance'—which was essentially used as a pictograph—had been known from the days of the Pyramids. In its most typical form,

Scales as Egyptian hieroglyph.

however, the upright support of the cross-beam shows a loop above for suspension.³ This type is occasionally represented in inscriptions of Class A

¹ For instance, the painted sarcophagus of H. 'Triada and a clay 'larnax' from Zafer Papoura in which a chariot scene can be faintly traced.

² It is to be regretted that Professor Martin Nilsson who first published this vase in his *Homer and Mycenae* (Fig. 56) from a photograph, supplied by the excavator, Mr Sjöquist, should have been so far carried away by his theme as to compare the subject with the well-known scene described in *Iliad* viii, 69 seqq., xxi, 209 seqq., &c. (p. 267). 'It can

be but Zeus taking "the scales of destiny" in order to determine the fate of the combatants'. The culture illustrated by the Enkomi tomb is still overwhelmingly Minoan, though—from the point of view of Religion, especially—a distinct Syrianizing tendency is perceptible. As the clay images show, there was a gross element in it, more at home at Hieropolis than the Aegean lands. The Homeric Zeus would have found himself in very strange company.

³ In an elaborate shape, illustrated in a

as can be clearly seen on a tablet from Hagia Triada, where a well-defined hook rises from the beam of the balance. A loop is seen in the case of a Shaft Grave example referred to below.¹ In Class B, however, the best representations of the 'balance' sign show the upright support terminating below in a broad foot, while the upper end of it is forked to hold the beam. This is clearly depicted on the tablets (Fig. 649 *a, c, d*, below) from Knossos.

The 'Scales' or 'Balance' Sign (τάλαντον) on Tablets: coupled with 'Ingot' Sign.

'Balance' sign on tablets.

The 'scales' or 'balance' is the Greek *τάλαντον*, with which, indeed,



FIG. 647. TABLET FROM 'TEMPLE REPOSITORIES', KNOSSOS, SHOWING 'BALANCE'.

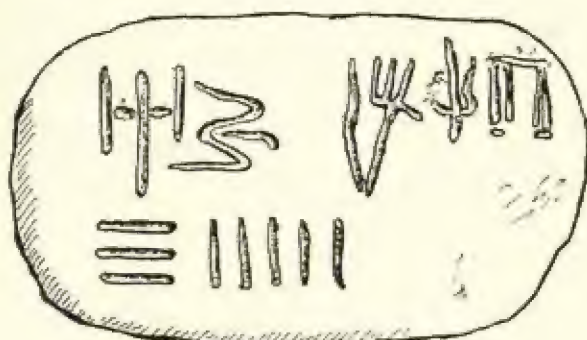


FIG. 648. TABLET FROM PAPAOURA ON BORDERS OF LASETHI, SHOWING 'BALANCE'.

Appears in Class A.

the talent weight of the ingots specially connects them. This character, as we have seen, had already occurred on a tablet of the earlier linear Class A, found in the Temple Repositories, here reproduced in Fig. 647. It is there coupled, as above noted, with the open hand sign springing from the character \vdash , reversed, which seems to supply a parallel to the Greek 'drachm' = a hand-full.² The 'balance' sign on Class A tablets from Hagia Triada is usually followed by numbers, which occur up to 19, including a fractional sum such as $1\frac{1}{2}$. On an example from Papoura, near the watershed on the way to the Diktaean Cave (Fig. 648), it is also followed by numbers = 35. In this case it is preceded by the 'open hand' sign

tomb of Beni Hasan the verticality of the upright support is told by a plummet. (*Beni Hasan*, Part IV, Pl. xxvii, Fig. 3 and p. 9.

From a drawing by Howard Carter.)

¹ See p. 659, n. 3.

² *P. of M.*, i, p. 619 (Fig. 455, a).

attached to a form of γ^1 and followed by an uncertain sign. The amount indicated may have been reckoned in Minoan drachms.

Apart from the sepulchral type of gold scales for the weighing of the

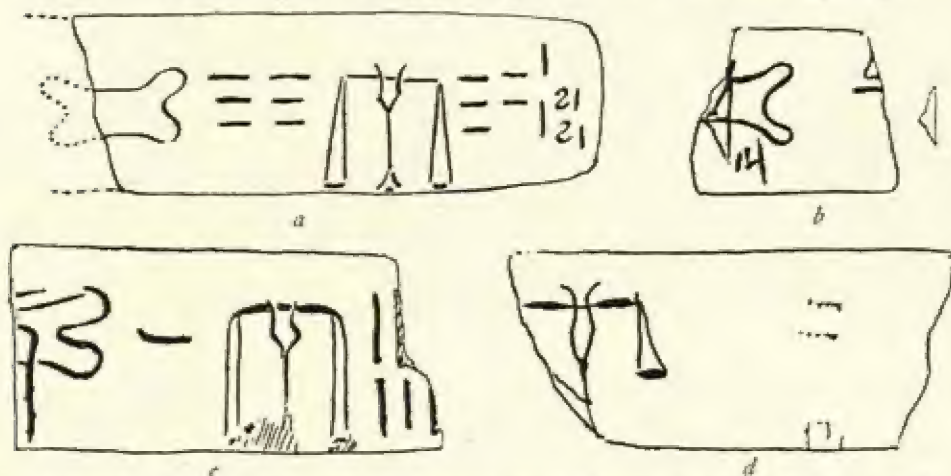


FIG. 649 a, b, c. FRAGMENTARY TABLETS FROM KNOSSOS SHOWING THE 'INGOT' AND 'BALANCE' SIGNS.

butterfly Soul,² from the Third Shaft Grave at Mycenae,³ the fullest illustration of Minoan scales is to be found in the specimen found in the Mavro Spelio Cemetery at Knossos,⁴ which seems to have served for ordinary personal use. The Palace scales for the weighing of ingots must have been of much larger size.

The 'balance' sign is seen on some more or less fragmentary tablets of the linear Class B from Knossos, in two cases preceded by the 'ingot' (Fig. 649 a, c). In one instance (c) the 'ingot' is crossed by the not infrequent linear sign γ . It is followed by a single horizontal line denoting 10, while the balance is coupled with six upright strokes signifying 6. In a, on the other hand, the figures attached to the 'ingot' = 60 show a certain correspondence with those that follow the balance = 52 and a fraction, to be interpreted with great probability as two quarters, or one half. It is noteworthy in this connexion that the difference between 60 and $52\frac{1}{2} = 7\frac{1}{2}$ 60 and an eighth deducted.

¹ A simplified form of this open hand sign is attached to a series of other signs on tablets of Class A. (See *P. of M.*, i, p. 645, Fig. 478; and cf. p. 619, Fig. 455 b 2).

² See *P. of M.*, iii, pp. 148-52; and cf. *Ring of Nestor*, p. 53 seqq.

³ G. Karo, *Mykenai*, Atlas, Pl. XXXIV,

Nos. 81, 82, where a larger and a smaller balance from that interment are restored. Cf., too, Text, p. 53, Fig. 13.

⁴ E. J. Forsdyke, *Mavro Spelio* (*B.S.A.*, xxviii), p. 256, Fig. 6, where scale pans, arm, and handle were found in Tomb III.

is exactly equal to one-eighth of the former sum. This figure might express the ratio between two nearly related standards. Or, again, it might represent the exchange value of the ingot as reduced by the amount specified—the price of copper having fallen in the Knossos market.

The number 60 of Fig. 649, *a*, after the ingot—the weight of which, as we have seen, was about that of a light Babylonian talent—is itself significant, and would represent its equivalent in *minas*. Each *mina* consisted of 60 shekels. So, too, the 3, and, again, 6 repeated after the 'balance' sign, points to an assimilation to duodecimal methods.

Still, the Minoan system of numeration was essentially decimal and the $\frac{2}{2}$ of the tablet itself refers to a unit which seems to have been reckoned in tens. The highest number that follows this double 2 sign is nine.¹

Conventionalized Ingots on 'Banner' Signs as Marks of Value.

Conventionalized ingots as marks of value.

A round stone weight found in a house at Zakro,² and contemporary, therefore, with the Linear Class A, shows, within an oblong frame, an ingot-shaped outline, Fig. 650, *a*, of the kind where only two sides are incurved. It has six pellets engraved on its lower surface and weighs 220 grammes (3.390.5 grains).³ It thus answers to a unit very exactly corresponding with an Egyptian 4-*kedet* weight in the Petrie Collection. The sign reappears in the ordinary A signary—apparently as a simple phonogram⁴—both in an original and a derivative shape (Fig. 650, *c*, *d*) in the same word-group $\text{𐀀} \text{𐀁} \text{𐀂} \text{𐀃} \text{𐀄} \text{𐀅}$.

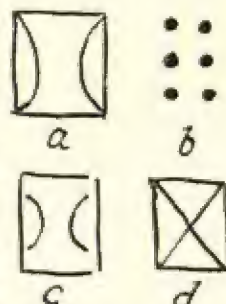


FIG. 650. *a*, *b*, ON UPPER AND LOWER FACE OF ZAKRO WEIGHT; *c*, *d*, ON HAGIA TRIADA TABLETS.

A parallel form showing the incurving on all its sides, like the ordinary ingot pictographs, occurs on two Knossian tablets of Class B—in these cases distinctly as an indication of value—superposed on a rectangle which is really a form of the 'banner' sign.

The examples on the tablet, Fig. 651, are of special interest in the


¹ The $\frac{2}{2}$ that indicates the fractional sum is not found with more than 2 units in this relation. In other connexions it is seen before higher amounts up to 34. (No. 785 of hand-list). In relation to the 'balance' sign it seems to correspond with the $\frac{4}{7}$ of Class A,

also interpreted as $\frac{1}{2}$.

² Hogarth, *B.S.A.*, vii, p. 136.

³ A. E., *Corolla Numismatica*, p. 346. The numerical relation of the two units shown in Fig. 651 was there pointed out.

⁴ On the Hagia Triada tablets, Nos. 23 and 26 of my own hand-list.

comparison that they supply to the Zakro weight, Fig. 650 *a, b*. The lesser units are represented by the frequently recurring  sign,¹ which is equally

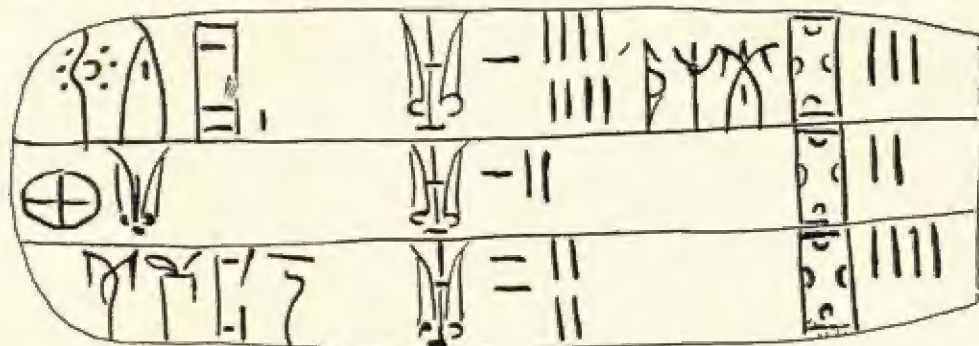



FIG. 651. TABLET OF CLASS B, KNOSSOS, SHOWING 'INGOT' SIGNS SUPERPOSED ON THE 'BANNER' AND EQUIVALENTS IN LESSER VALUES.


common as an ordinary phonogram in word-groups and as a sign of value before numbers. In this latter connexion it is especially frequent after the 'flock' signs illustrated below.

That this sign and the 'ingot' are here numerically equated—the latter amounting to six of the former—is clear from the respective numbers. In the first line we see 18 of one corresponding with 3 of the other; in the second 12 answers to 2 and in the third 24 to 4.


Inasmuch, moreover, as one-sixth of the Zakro weight with the parallel 'ingot' sign is equivalent to the 4-*kedet* Egyptian weight it looks as if the  sign may have represented that value.²





Here, and again in Fig. 651 b, the conventional ingot appears on the

³ No. 51 of the B signary, Fig. 666, c, below.

* This result lends no countenance to the opinion advanced by Dr. J. Sundwall, *Zu dem Minoischen Währungssystem* (*Mélanges Glot.* pp. 827, 829) and *Minoische Rechnungsurkunden* (*Soc. Scient. Fennica: Commentationes hum. litt., iv. 4*) that the  sign represents a 'balance' and, through that, a 'talent'. It differs in fact from the 'balance' sign, such as we know it in both the A and B signaries, in essential particulars. In the 'balance' sign the apexes of the triangle formed with the scales are consistently joined by the horizontal beam. In his otherwise somewhat conventionalized reproduction of the tablet (*Mé.*

Glots, p. 828), Dr. Sundwall supplies versions of the sign which are certainly misleading.

Thus in line 2, where the  occurs as a phonetic character in a word-group (probably a personal name) and, again, as an indication of value, it is rendered by him as two distinct char-

acters    12 

The first is a non-existent and altogether misleading variation of the sign itself; for the second he takes the 'balance' pure and simple. Elsewhere he prefers a third form which is neither the one nor the other and resembles a misshapen double axe.

'banner' sign.¹ This is itself frequently used as a vehicle for other signs as well as alone and, in both cases, before numbers. The trilateral sign-group which precedes this compound character on both tablets begins with Δ .

Late
Minoan
'dumps':
prede-
cessors of
coinage.

Coinage was as yet unknown, and its forerunners in the shape of small, more or less 'monetiform' dumps of precious metal only make their appearance at a date later than the catastrophe of the Knossian Palace. A silver dump of this class was found, however, in 1901 in a late Minoan deposit above the earlier floor-levels of the East Magazines, which fits on to others of gold that had already occurred in a Late Cypro-Minoan grave. It is simply a blob of metal dropped on to a rough surface, which, however, in this case has the appearance of having been engraved with the broad H sign (Fig. 652, *a*).

Its weight is 3.654 grammes (54.4 grains), and it would thus answer to a fourth of

a Phoenician shekel of the average weight of about 14.616 grammes (225.6 grains)—a system represented at Knossos by the leaden weights in the shape of a disk. Three gold 'dumps' of this kind, answering to both Egyptian and Oriental standards (Fig. 652, *b, c*), had been already found in a tomb at Old Salamis of a date which, from the general evidence of that part of the Cemetery, may be assigned to about 1300 B.C. One of these, *c*, was of a more elongated form, like the earliest electrum coins of Lydia. I had myself at first mistaken the silver 'dump' from Knossos for a worn specimen of an early Aeginetan silver stater.

The true Minoan mediums of currency seem rather to have been bars and rings of precious metal. The gold rings, of which a series was found at Mycenae, answer approximately to a mean weight

Gold rings
and bars
as
mediums
of cur-
rency.

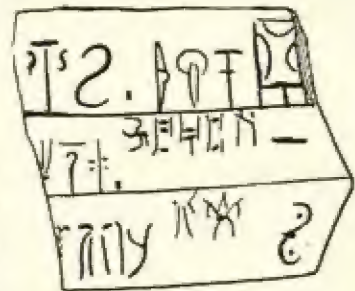


FIG. 651 B. FRAGMENT OF TABLET SHOWING 'INGOT' SIGN ON BANNER.



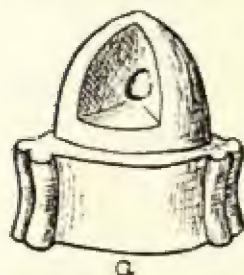
FIG. 652. *a*. SILVER 'DUMP', KNOSSOS. *b, c*. GOLD 'DUMPS', OLD SALAMIS: CYPRO-MINOAN.



FIG. 653. GOLD 'SKILLING': MYCENAE.

¹ See Table, Fig. 708 (B, 94), p. 725.

of about 8.7 grammes (135 grains),¹ which looks like a slight reduction of the Egyptian *kedet* system.² That gold bars were in use is demonstrated by a complete example found in a Cypro-Minoan tomb at Old Salamis,³



weighing 72.12 grammes (1,113 grains) corresponding to 8 Egyptian *kedets* of 9.025 grammes (139.125 grains).⁴ A cut section, representing a fraction of such a bar of pale gold or electrum (two and a half *kedets*) was found at Mycenae (Fig. 653).⁵ Similar sections of the silver bars of Saxon treasure hoards were known as *skillings*. The Mycenae specimen is in fact a true 'skilling' or 'shilling'.

A Minoan
'shilling'
from
Mycenae



FIG. 654. GOLD
WEIGHT-SEAL:
KNOSSOS. (½).

That, however, the older standard in Crete was the Egyptian has received fresh and striking confirmation from a quite recent find made on or near the site of Knossos.⁶ This is a 'weight-seal' of solid gold and scaling 12.25 grammes (189 grains), which brings it within the normal limits of the Egyptian gold unit.⁷ Its shape, with two small upright bars at three points of its circumference, is unique, but the coiling double sprays engraved below find a parallel in the design in the field of an ivory seal from the primitive tholos B of Platanos,⁸

Discovery
of gold
'weight-
seal' =
Egyptian
gold unit.

where also occurred a haematite cylinder of the Age of Hammurabi.⁹ The coils with their leaf-like ends are so devised as to prevent its being cut down. The fact that it is of solid gold itself points to Nubia—the 'Land of Gold'—the Egyptian *nub*—as its original source.

¹ W. Ridgeway, *Metrological Notes: Had the People of Mycenae a Weight Standard?* (*J. H. S.*, x, p. 90 seqq.). Professor Ridgeway considered this to represent a slight increase of the light Babylonian shekel of about 8.4 grammes (130 grains). But as observed by me, *Minoan Weights, &c.*, p. 338, it was more in accordance with precedent in the case of a commercial people slightly to reduce a borrowed standard. The *kedet* units of Minoan weights descend to about 9 grammes (c. 138 grains).

² The *kedet* weights in the Petrie Collection range from 8.812 grammes (136 grains) to 10.108 grammes (156 grains), giving an average of 9.160 grammes (146 grains). Weigall, *Proc.*

Soc. Bibl. Arch., xxiii, 1901, p. 378 seqq.

³ G. F. Hill, *B.M. Coin Cat. (Cyprus)*, p. xxi.

⁴ *Minoan Weights, &c.*, *op. cit.*, p. 355.

⁵ It was obtained there by Mr. C. H. Hawes, thanks to whose kindness I was able to publish it, *op. cit.*, p. 354, Fig. 10. Its weight is 22.66 grammes (c. 350 grains).

⁶ The object had migrated to Athens together with Cretan bead-seals, but the approximate record preserved by its owner of its provenance seems to hold good.

⁷ See p. 654. A. E., *op. cit.*, pp. 345, 346.

⁸ Xanthudides, *Vaulted Tombs of Mesara* (ed. Droop), Pl. XIV, No. 1059, and p. 116.

⁹ *P. of M.*, i, p. 198, Fig. 146.

§ 110. FIRST DISCOVERY OF LARGE HOARDS OF CLAY TABLETS IN ADVANCED LINEAR SCRIPT (B). SIGNS OF CLASS B COMPARED WITH A: THEIR ANALYSIS AND ASSOCIATED SYSTEM OF NUMERATION.

Discovery of hoards of clay tablets (associated sealings, already described); At the time unparalleled phenomenon; The first hoards brought to light in S.W. region; 'Granary' and 'Chariot' tablets; Armoury deposit; Mostly stored on the upper floors; 'Chariot' tablets in basement closet with remains of chests; 'Adze' tablets in original order; Classical traditions of finding of prehistoric Writing; Bronze tablet of Alkmênê's Tomb; Earthquake reveals tablets at Knossos in Nero's time—Diktys' 'Chronicle of Trojan War'; The Tablets of Linear Class B—forms contrast with earlier documents; Retrospect and Synopsis of Class A—transitional examples fitting on to the Hieroglyphic type; 'Monumental' group of A inscriptions on stone vessels of ritual class; Clay series; Hagia Triada group of tablets, illustrating commerce and industry; Synopsis of Class B; Signs used both phonetically and ideographically; A and B classes compared—common source, but B more advanced; Egyptianizing element in B—papyrus wand and uraeus; Official and priestly emblems 'throne and sceptre' and 'horned head-piece'; Numeration of A and B—practically same; 'Percentage Tablets'; Signs of Addition.

Discovery
of Hoards
of Clay
Tablets.

ALREADY, in describing the sealings from the late Palatial deposits dealt with above, a feature has called for notice that stands in relation to what, at the time of the Excavation and since, has been by many regarded as its crowning result. This was the discovery of a series of hoards of clay tablets, numbering—complete or fragmentary—over 1,600, presenting inscriptions in a more advanced linear style than any yet brought to light.

Associated
sealings
already
described.

In describing the clay sealings, a series of examples have been noted on which one or more of the faces bears graffito inscriptions, consisting, it would appear, of the names and titles of officials in the same form of writing, while in several cases the seal impression itself has been countermarked in a similar manner. In touching on the Upper West Magazines and connected system it has been further necessary to anticipate a more general account of the tablets themselves by a reference to examples derived from those relating to granaries or stores of cereals, as well as to others bearing on the Standard Weight there preserved, and presenting figures of balances and of copper ingots.

The emergence of such a mass of clay records in a highly advanced form of linear script was the more striking at the time of the excavations since other parallel finds illustrating the preceding phase, A, of this script, such as later occurred at Phaestos, had not as yet come to light. Nor was a single specimen known of a clay document of the more archaic 'Hieroglyphic' class such as both Knossos and Mallia were later to produce. With the exception of the inscribed Diktaean Libation Table the materials hitherto accumulated had been derived from early seal-stones.¹ This crowning discovery thus stood out as the culmination of a long series of more isolated finds, and as a striking confirmation of the views long upheld by me, that, from the point of view of Writing, the great early civilization of Greece was not dumb—whether or not a key to the decipherment of its language may yet be recoverable.

On the site of Knossos itself my hopes had been encouraged at an early date, both by the discovery of seal-stones with hieroglyphic signs² and by the sight of a fragment of a burnt-clay slip presenting some incised linear signs, which had been a surface find on the site, derived no doubt from the previous diggings in the Third Magazine.³ But the few signs

At the time an unparalleled phenomenon.

¹ So far as the hieroglyphic system was concerned, my first hint of its existence was supplied by a four-sided cornelian bead-seal with groups of signs presented to the Ashmolean Museum in 1886 by Mr. Greville Chester, and said to have come from Sparta. Subsequently, however, I found an impression of the bead-seal in the possession of its original owner in Candia who had obtained it in Central Crete. This piece of evidence was followed by the recognition during a visit to Athens in 1893 of several bead-seals of the same class, all of them derived from Crete, and—as a result of my early exploratory journeys through the Central and Eastern parts of the Island from 1894 onwards—of the acquisition of a whole series from the various sites on which they were found. The first announcement of the existence of a hieroglyphic script in prehistoric Crete was made by me to the Hellenic Society in 1893 in giving an account of the Aegina Treasure. (For the results of my early quest in Crete see *Athenaeum*, June 23, 1894; *Times*, Aug. 29; and a paper read in the Anthropol-

logical Section of the British Association at their Liverpool Meeting, September 1894. See, too, *Cretan Pictographs, &c.*, *J. H. S.*, vol. xiv, Pt. II, 1895. For the account of the inscribed Libation Table and the evidence of the Linear Script A, see *Further Discoveries of Cretan and Aegean Script*, 1898 (in *J. H. S.*, xvii and B. Quaritch); and cf. *P. of M.*, i, p. 627 seqq.)

² In 1895. Two seal stones had also come to my notice, bearing groups of hieroglyphic characters, picked up by peasants on the site (*Scripta Minoa*, i, p. 151, P. 8*, with early linear signs, and *Ibid.*, p. 12).

³ It was in the possession of Kyrios Zacharakis, a Candia chemist, and subsequently perished at the time of the massacre and the destruction of the Christian quarter of the town in 1899. As noted above, this 'tumultuary' excavation—to use the appropriate Italian expression—had thrown out several tablets, in a broken condition, only recovered, years afterwards, by our sifting the dump heap.

preserved on this seemed to be of so advanced a character that it was difficult off-hand to accept them as Minoan. But hopes were raised and imagination kindled, though for the time this fragmentary relic could only be placed to a reserve account.

First Discovery of Hoards of Clay Tablets on Site of Knossos.

The first
hoards
brought
to light in
S.W.
region.

Granary
and
Chariot
Tablets.

When, however, in the spring of 1900—after six years of fruitless effort—it was possible at last to begin the methodical excavation of the site, the attack on what proved to be the Southern Terrace of the Palace was not long in leading to a decisive result. On March 30, 1900, the larger part of an elongated tablet came to light with sign-groups and numbers incised on it—of the same kind as those on the imperfect specimen. In the days succeeding this discovery a series of such tablets was found within what afterwards proved to be the Second West Magazine. This was followed up by the discovery on the basement level East of the Upper Propylaeum of a clay receptacle in the form of a bath, the preserved lower part of which contained a whole hoard of similar tablets, several with pictographic signs showing that they referred to stores of grain.¹ These tablets were arranged in rows, and the charred wood found round them indicated that they had been placed in a box, which had probably fallen into the clay receptacle from above. In a closet under a small staircase a little North of this had been placed at least four boxes—seven bronze hinges being picked out from the carbonized remains—in association with which was a considerable, though a good deal broken, deposit of tablets, many of them relating to horses and chariots,² that gave it its distinguishing name.³ It is to be noted that one piece of the charred wood showed a waved and foliated border in relief.

'Armoury'
Deposit

In the 'Armoury' Deposit already referred to,⁴ where eighty inscribed tablets had fallen into a basement magazine—fifty of them referring to chariots and their parts—remains of some of the wooden boxes in which

¹ See above, p. 623. The specimen given in Fig. 609*e* clearly refers to barley.

² See below, p. 788, Fig. 763.

³ This large deposit in fact referred to a great variety of possessions, the objects depicted on them including ears of corn, various kinds of trees, saffron flowers, as well as implements including spades and single-edged axes. There

were also lists with the 'man' and 'woman' sign (see A. E., *Report, Knossos*, 1900, pp. 57, 57; *B. S. A.*, vi; and cf. *Scripta Minoa*, i, p. 42).

⁴ See pp. 616, 617, and cf. A. E., *Report, Knossos*, 1904 (*B. S. A.*, x), p. 57 seqq. (See too, below, p. 832 seqq.).

these had been preserved were also found, in this case together with bronze loop handles. Here, too, as with many other boards, occurred a series of clay sealings. Some of these, as has been noted,¹ were countermarked with the arrow sign, standing in connexion with remains of chests here found containing masses of arrows with bronze heads, a pictographic figure of one of which was engraved on a tablet.

In this case pieces of the plaster floor of the upper chamber in which the tablets had been stored came to light at a lower level, and a further proof of their upper story location was afforded by the burnt condition of many specimens, some being actually reduced to cinders. The same was true of a series of tablets found above the level of the Upper East-West Corridor and its continuation North, some of which may, indeed, have been derived from a roof terrace where they had been placed for sun-baking.

On the other hand, in the exceptional instance of storage in a basement closet, illustrated by the 'Chariot Tablet' deposit, a phenomenon of a contrary kind was observable. Many of these, together with the chests that had contained them, having been probably set on shelves on the back wall of the closet, bore evidence of the action of fire. Others, however, that had lain on the floor of the little chamber had escaped this action, and proved to have been insufficiently baked. A group of four of these that lay intact in their original order on the pavement were carefully cut out by me in one piece with the indurated earth that held them together, and temporarily transferred for the night to the old Turkish house that at that time served as head-quarters, in the glen below Kephala. But a torrential storm that came on in the night poured through our rotten thatch, and inundated the tray containing the tablets. When the mischief was discovered it was too late, and they had been reduced to a pulpy mass.² Together with them, unfortunately, was a clay sealing in the same insufficiently baked state, presenting a design of a chariot and horses with a charioteer and a personage behind him. It had been evidently used by the superintendent of the royal stables to seal the chest that had contained the tablets. The type much resembled one found in the somewhat earlier hoard of sealings from Hagia Triada.³

Part of a hoard of tablets in the same unbaked condition came to light on the floor of the South-East Corner of the Eighth Magazine.⁴ These were embedded in a clay mass representing the remains of a much larger number reduced to a kind of pulp, owing to the effects of moisture, as, in the

Mostly
stored on
upper
floors.

'Chariot
Tablets'
in base-
ment
closet:
remains
of chests.

Effects of
storm.

'Adze'
Tablets
from Mag.
VIII in
original
order.

¹ See above, pp. 616, 617, and Fig. 603.

² See, too, *Scripta Minoa*, i, p. 148.

³ See below, p. 828, Fig. 808.

⁴ See *Scripta Minoa*, i, pp. 44, 45.



FIG. 655. CLAY TABLETS REFERRING TO 'ADZES' SHOWING ORIGINAL FILE. ON FLOOR OF MAGAZINE VIII.

Little Palace, were imperfectly sun-baked bricks. With the aid of a plaster backing I was here able to raise what had been preserved of a small series of these in a regular file, and thus preserved a record of their original



FIG. 656 *a, b, c.* "ADZE" TABLETS.

arrangement (Fig. 655). From the fragments of decayed gypsum with which they were associated it appears that in this case they had been enclosed in a gypsum coffer, broken in its fall from an upper floor.

This group of tablets is, as will be seen from Fig. 656, *a-c*, marked with a sign apparently depicting an adze,¹ followed by numerals, clearly shown on Nos. 2, 5, 6, 7 as 28, 6, 30, and 217.

¹ The whole or part of this sign is visible on all of these except the topmost, of which only the first half is preserved. The adze is scored with an inner line at both extremities, perhaps to indicate their sharpening at both ends.

Was the Discovery of the Minoan Script anticipated by Classical Antiquity?

There is solid evidence leading to the conclusion that the first discovery of the clay archives of Knossos presenting an unknown script goes back to the days of the Emperor Nero.¹

Classical traditions of finding of prehistoric writing.

Bronze tablet of Alkmênê's Tomb.

Such a discovery, moreover, does not stand alone. The proofs of the currency of the Minoan system of writing at Thebes in Boeotia supplied by the inscribed vases illustrated below²—supplementing the specimen already known from Orchomenos—throw a new light on a find that Plutarch³ ascribed to Agesilaos of Sparta in the tomb of Alkmênê at Haliartos in the same region. This was a tablet of bronze 'containing many letters which excited wonder from their appearance of great antiquity. For nothing could be understood from these, though, on washing the bronze, they came out clearly—the type of the letters being outlandish and most like the Egyptian'. At the request of the King of Egypt, to whom a copy was sent by the priest Khonouphis (who, if they had been Egyptian hieroglyphics, might well have read them), after much study and hunting out of the various kinds of characters in 'old books', reported that it belonged to the time of King Proteus—in other words, to the Age of the Trojan War—and contained a general exhortation to the Greeks to found a contest in honour of the Muses, and, setting arms aside, to devote themselves to the peaceful rivalry of letters and philosophy. With reference to the material and object it will be recalled that a small bronze tablet, inscribed with two letters of the Linear Class A—apparently giving the name of the votary whose figure appears beside it—was brought to light in the Diktaean Cave,⁴ from the same offertory stratum as that containing the inscribed Libation Table.

Earthquake reveals tablets at Knossos

Knossos itself was the scene of a parallel find of the same nature, with which we are immediately concerned.⁵ There was a fictitious compilation attributed to Diktys the Cretan, well known from what purported to be a Latin translation by a certain L. Septimius of a Greek original and written towards the end of the fourth century after our era. This work, the 'Ancient Historie and trewe and syncere Chronicle of the Warres between the Grecians and the Trojans', to quote the title of its earliest English

¹ A fuller account of this and analogous discoveries going back to Classical times will be found in my *Scripta Minoa*, vol. i, p. 106 seqq (§ 13).

² See below, p. 739 seqq.

³ *De Genio Socratis*, capp. v, vii: Cf. S. Reinach, *Anthropologie*, 1900, p. 499 seqq.

⁴ *P. of M.*, i, pp. 632-4, and Figs. 470, 471.

⁵ See on this, A. E., *Scripta Minoa*, i, pp. 108-10.

version by John Lydgate, has been shown from the Tebtunis papyri to have been in fact, as its author stated, an adaptation of a Greek original, the recently discovered fragment of which dates from early in the third century.¹ Further evidence supplied by later references to an independent Byzantine version throws back the date of the Greek archetype still further,² and make the more natural the bringing of it into connexion with an actual historic event that took place in the days of the Emperor Nero.

in Nero's
time.
'Chronicle
of Trojan
War'.

This was the great earthquake that occurred in the thirteenth year of his reign, A.D. 66—at the time when the Emperor was making his mad progress through Greece—and which actually ravaged Crete. It may be further concluded that Knossos, in the most earthquake-stricken region of the Island,³ was specially affected, and that one of the many repositories of the inscribed clay tablets should have been laid bare on the Palace site by this convulsion would in itself have been a very natural result. The recent discoveries in fact invest the origin of the Diktys story with an entirely new appearance of probability.

At Knossos, we are told in the prologue to the work, an earthquake that had caused a great overthrow exposed the interior of the Tomb of Diktys, bringing to light a 'tin chest'. Some passing shepherds who, seeing this, had opened it in search for treasure, found instead documents of 'lime-bark', inscribed with 'unintelligible letters'. These were taken to Nero, then in Greece, who, supposing them to be Phoenician, called in Semitic experts to interpret them. When Nero commanded something must be done, and the doctors forthwith proceeded to interpret them as the journal of one of the ancients—the Knossian Diktys, companion of Idomeneus, who had been present at the Trojan War.

The brown, half-burnt tablets of the Palace themselves bear a distinct resemblance to old or rotten wood, and it is clearly possible that the earthquake shocks had revealed one or more of the 'kaselles' with their lining

¹ Grenfell and Hunt, *The Tebtunis Papyri*, Pt. II, 1907. The conclusion of the editors was that 'apart from unnecessary verbiage and occasional minor distortions the Latin version follows the original faithfully enough'.

² See Ferdinand Noack, *Philologus*, 6^{ter} Suppl. Band, 1893, pp. 401-500. He showed (as against those who regarded the work as wholly a fabrication of Septimius) that the reference to it by Malalas (Sixth Century) in his *Ἐκλογὴ Ἱστοριῶν*, and Cedrenus (Eleventh

Century) that these Byzantine references were based on a late Greek version parallel with the Latin, but independent of it. Both versions in fact went back to a Greek archetype of much earlier date. On the general question see, too, W. Ramsay Smith's *Dict. of Biography*, &c. (1902), Art. *Diktys*.

³ See *P. of M.*, ii, Pt. I, p. 313 seqq.; and cf. V. Raulin, *Description physique de la Crète*, i, p. 429.

of old lead sheeting—easily confounded with tin. The precipitation of a hoard of clay tablets at an earlier date into one of these is itself paralleled by the boxful that had fallen into the bath-like receptacle described above.

Forms of Tablets associated with Linear Script B.

The elongated 'slip' type of clay tablet, illustrated by the series from the

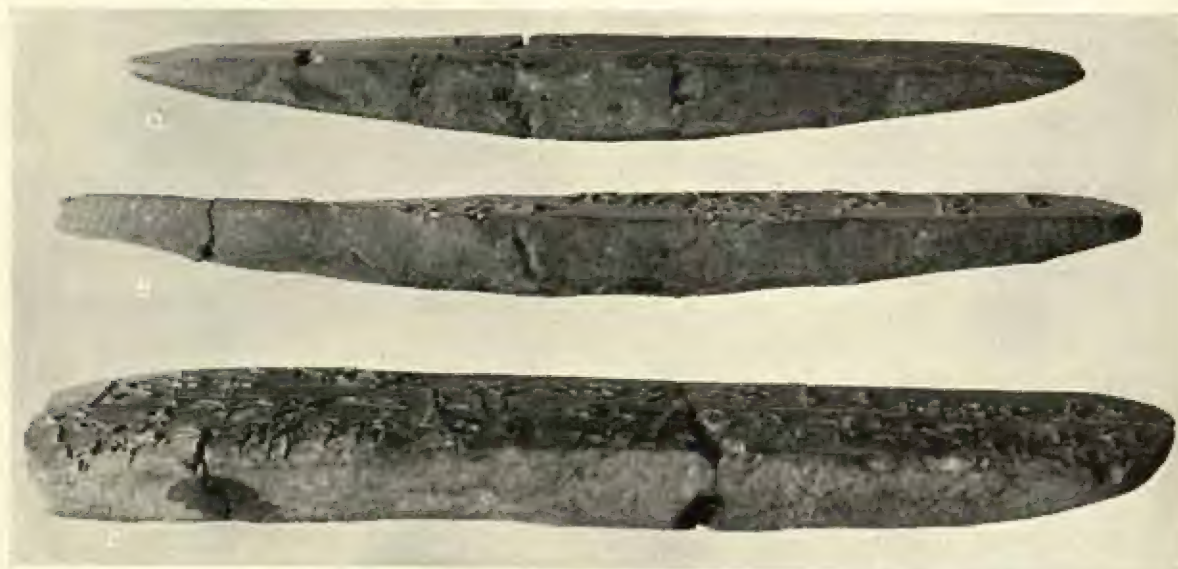


FIG. 657 *a, b, c.* TABLETS OF ELONGATED FORMS SEEN FROM THE SIDE.

Tablets
of Linear
Class B:
their
forms

Eighth Magazine (Figs. 655, 656) is the commonest and most characteristic of those inscribed with the Linear Class B. These as a rule present a single group of signs, followed by two rows of smaller signs and numbers, divided by a horizontal bar. The back of these curves slightly in a longitudinal direction, so that the ends are somewhat wedge-shaped. (See Fig. 657.) A copy of the inscription on Fig. 657, *c*, which is of a broader three-lined type and belongs to the 'Cereal' class, is given in Fig. 658. Some of these 'elongated slips' attain a length of 24 centimetres, or about 8 inches.

Broader varieties (like Fig. 657, *c*) are also found, divided along the whole length by two or at times three horizontal lines. Larger specimens of this class—as one in which the 'wheel' sign occurs in each line¹—

¹ See below, p. 795, Fig. 768.

approach in outline a regular rectangle, in the latter case about 14 cm. ($5\frac{1}{2}$ in.) in width, by 8 cm. ($c. 3\frac{1}{8}$ in.) in height, but these are of quite exceptional occurrence.

The tablets of another class are proportionally higher than they are broad, one or both ends being generally somewhat rounded off.¹

Nothing more than a succinct general account can be here attempted, with special reference to the inner economy of the great Palace and the

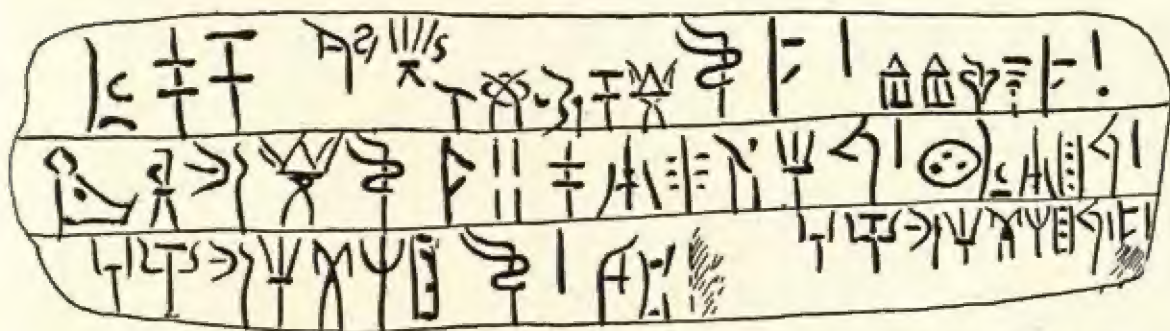


FIG. 658. BROAD, ELONGATED TABLET OF 'CEREAL' CLASS: HANDLIST NO. 13. (Cf. FIG. 657, c.)

varied possessions of its lords. These, indeed, are copiously illustrated by the documents themselves, appearing often in a pictorial form on the margin of inventories.

At the same time, for the right understanding of the script of this late palatial type, constant reference must be made to that of Class A, which, at Knossos at least, occupies an earlier stratigraphic position. In the lower direction, again, it is possible now to supplement a general sketch of Class B with some surprising evidences of its survival on the Mainland side.

Retrospect of the Linear Class A.

A general account of Class A has already been partially attempted in the first Volume of this work,² but some retrospect of the subject is indispensable to the endeavour to place Class B in its true relation and to supply a whole series of illuminating comparisons.

The Linear Script A had, as has been already shown,³ a much wider diffusion in the Island than that which succeeded it at Knossos. It is clear that in the Palace itself it was in general use from the earlier phase of M. M. III till the close of L. M. I *a*, though—owing to the remodelling

Retro-
spect of
Linear
Class A

¹ E.g., p. 695, Fig. 680; p. 703, Fig. 686, &c.

² *P. of M.*, i, pp. 612 seqq., § 29.

³ See, especially, *P. of M.*, i, pp. 636, 637.

of the building that took place about the latter date—its records were largely destroyed. At Phaestos only a single tablet, resembling those of the 'Temple Repositories' at Knossos, marks the earlier (M. M. III *b*) stage, but the dependencies of the neighbouring 'Little Palace' of Hagia Triada, where the bulk of the known tablets of this Class came to light, bring down its records well into the First Late Minoan phase. The ceramic associations indicate that this class of script had survived in Southern Crete at least to the L. M. I *b* stage.

Transitional A Class fitting on the Hieroglyphic.

It is interesting to observe that both at Palaikastro¹ and at Mallia² early examples of the Linear Script A appear on clay bars of the same type as those bearing the Hieroglyphic script at Knossos. On the other hand, the numeration on the clay bars of Mallia of the Hieroglyphic Class already conforms to that of the Linear Class A as seen at Hagia Triada, Knossos, and elsewhere.³

Synopsis of Class A for Comparison.

Synopsis of Signary A.

For the sake of comparison it has been thought well to reproduce here in a somewhat revised form the synopsis of the signs of the A script given in the first Volume of this work (Fig. 659).⁴ To this is appended, in

¹ R. C. Bosanquet and R. M. Dawkins, *The Unpublished Objects from the Palaikastro Excavations* (Suppl. Paper of the B. S. A.), p. 146, Fig. 128, and see my note. The numeration certainly seems to belong to the archaic class, but presents difficulties.

² Fernand Chapouthier, *Les Écritures minoennes au Palais de Mallia* (Paris), 1930, P. Geuthner, i, pp. 55, 56 (Ch. III, *Les Inscriptions linéaires*). In his excellent analysis of these he shows that the signs for this group contain characteristic types of Class A.

³ Chapouthier, *Id.*, pp. 53, 34. It must, however, be said that I am quite unable to accept M. Chapouthier's view that the Hieroglyphic Deposit of Mallia belongs to M. M. III. The signet impressions on clay documents with a parallel script from Knossos and themselves presenting similar hieroglyphs are of types that cease at the close of M. M. II. Some belong to M. M. I. Linearized forms of the Hieroglyphic class occur as graffiti on a characteristic M. M. I *a* form of clay jug with

hatched decoration. One of these from a primitive *tholos* found by me at Krasi (about 3 hours South of Mallia and afterwards fully excavated by M. Sp. Marinatos) is, from its context, clearly M. M. I *a*, and that published by me in *Scripta Minoa*, i, p. 12, Fig. 6, represents a parallel type. Those from Nirou Khani stand in the same relation (*Eph. 'Apx.*, 1906, Pl. 9, 1-3). Vases of the same form and similar incised hatch-work were found, as M. Chapouthier himself admits (*op. cit.*, p. 64, Fig. 5), in the deposit near the tablets at Mallia, and the 'rippled' tortoise-shell ware also found there itself goes back to M. M. II. The bars, however, with the Linear Script A, may well be of M. M. III *a* date.

⁴ A provisional list of signs belonging to the advanced Linear Class A is given in *P. of M.*, i, p. 642, Fig. 476. To the 90 types there given I am here able to add those given in Fig. 660: Of these the vegetable sign 91 is clearly different from No. 44 of Fig. 476, and in a reversed position (c of No. 18 finds its place here).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43

44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

FIG. 659. SYNOPSIS OF SIGNARY OF CLASS A.

Fig. 660, a supplementary list of 14 additional signs and, in Fig. 661, some distinctive ideographic signs. Some of these are of special interest. The symbolic figure No. 1, as already pointed out, probably holds a primitive

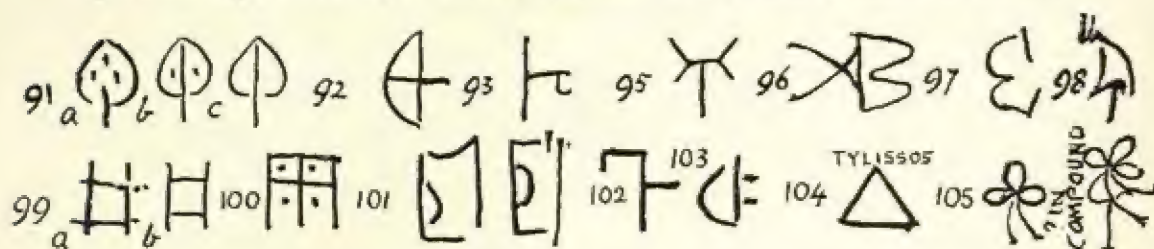


FIG. 660. SUPPLEMENT TO LIST OF SIGNS OF CLASS A.

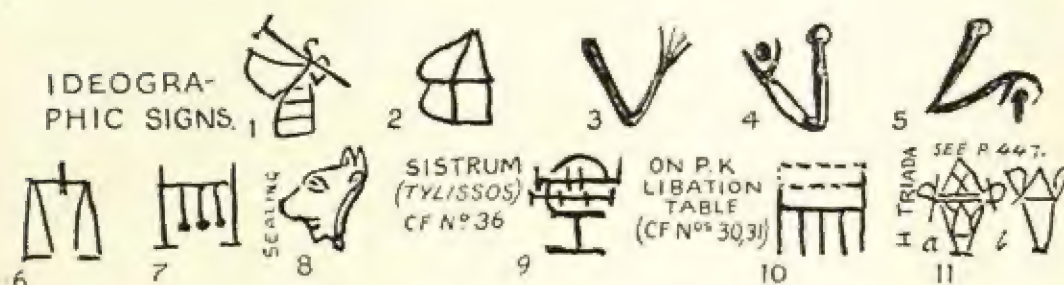


FIG. 661. ADDITIONAL IDEOGRAMS OF CLASS A.

anchor. The bent arm sign, No. 4, will be shown to have an offertory significance. No. 7, repeated at Hagia Triada by itself at the end of a group, is clearly a loom; in No. 8 we may recognize a lion's head 'rhyton' of the well-known class to which the gold example from the Fourth Shaft Grave at Mycenae belongs. The profile is curiously similar.

Deducting signs of obviously ideographic import, and others—like the 7 forms (No. 64)—specially connected with numbers, the total number of characters of Class A that may have been capable of phonetic usage in general currency perhaps amounted to about 85, though in many cases it is impossible to attain certainty.

The more or less 'monumental' group of inscriptions on stone vessels of a ritual character (such as, notably, the Diktaean Libation Table)

No. 92 seems to be a bow and arrow, 96 looks like the 'land' or 'mountain' sign of the Hieroglyphic series placed on its side and provided with legs. No. 97 seems to be a

different type from Fig. 476, 62 ('manacles'), and Fig. 661, 7, to be identified with a loom, is here placed among the ideograms.

that exclusively distinguish Class A has already received some notice in this work. It is of special interest as presenting certain recurring formulas, like **BYYZ**, that are seemingly dedications.¹ It is clear that a sacral element is also at times present in the case of the clay tablets. The 'sistrum' signs, Fig. 661, very fully rendered in No. 9, on a tablet from Tyliossos, may well point to an orgiastic aspect of the cult, such as that illustrated by the Hagia Triada 'rhyton'. Symbols of divine protection, already illustrated by the Goddess as Mistress of the Sea, also make their appearance. The primitive 'anchor' type is combined in No. 1² with what may be best interpreted as a single-bladed axe, so prominent in the later cult. Here they are incorporated in a female impersonation, and a male presentment of the kind is also known.³ In one case the 'ship' is coupled with the 'throne' sign of this Class.

The conclusion that the flat oblong or squarish type of clay tablet that comes in early in this Class was due to Oriental example, commands general acceptance. But the comparatively small field offered by this form of tablet gave little room for the scribe who in any case had to eke out his incomplete methods of actual writing with pictorial illustrations of the objects referred to. It was doubtless on account of this that from the

Smaller squarish A tablets of Oriental tradition.

Cramped inscriptions.



FIG. 662. COMPONENT CHARACTERS OF CLASS A.

first there was a tendency to save space by fitting together two or sometimes three separate characters into a simple compound form. Of such ligatures a considerable list may be made out, but it is sufficient to reproduce here in Fig. 662 a selection already made,⁴ largely concerning the 'hand and forearm' sign **7**.

¹ *P. of M.*, i, pp. 630, 631.

² See *op. cit.*, ii, Pt. I, p. 249, Fig. 146.

³ In *Ibid.*, ii, Pt. I, pp. 248, 249, and Fig. 145 (wrongly described as 'winged' figures in underline of Figure). The Axe thus vitalized

should not, as in *loc. cit.*, i, 249, be connected with the Double Axe, but rather with the single bladed kind.

⁴ *P. of M.*, i, p. 645, Fig. 478.

This habit, which gives the tablets of Class A a rather crabbed appearance, is at times the cause of some obscurity. On the other hand, it is to be observed that examples of the A script executed under conditions free from this artificial limitation, such as those, above referred to, incised on stone libation vessels, the graffito or painted inscriptions on walls, or those incised on the large jars, are almost entirely free from these compound forms.

Hagia
Triada
group.

The small, nearly square-shaped tablets of M. M. III *b* date, such as those from the Temple Repositories and a single, more or less contemporary specimen from the Phaestos Palace, show a tendency in the succeeding L. M. I Period somewhat to enlarge their dimensions. Far the most prolific source of these are the deposits found in buildings outside the Little Palace at Hagia Triada, which indeed give the best idea of the whole class of tablets bearing the A script. These, as is well shown in the case of a large official residence, were associated with pottery of L. M. I *a* type, but it is clear that some of them overlapped L. M. I *b*.

Incipient
reaction
of Class B:
decimal
sign.

One consequence of this late duration was the reaction of certain characteristic forms of the Knossian Class B.¹ This, too, is corroborated by a significant change in the decimal sign of the numeration, which is otherwise—as shown by Comparative Table, Fig. 676, below—very similar in the two groups. The earlier A symbol for 10—inherited from the Hieroglyphic system—is a single pellet (•). This, however, is transformed by intermediate stages into the universally diffused B equivalent of the decimal sign, a horizontal stroke (—). The evidence on the whole points to the surviving use of Script A, at least down to the close of the L. M. I *b* Period—contemporary with the earlier phase of L. M. II at Knossos—or, approximately speaking, well down into the Fifteenth Century before our era.

Com-
merce and
industry
illustrated
by H.
Triada
tablets.

In addition to the evidences of maritime enterprise supplied by the naval types and tablets of Class A from Hagia Triada, there may be found many illustrations of industry and commerce. References are to be seen to the cultivation of saffron,² of olives,³ and apparently other trees good for fruit or timber, while here, as in Class B, the 'barn' sign⁴ recurs as an indication of cereal produce. The loom speaks for the existence of textile industry. Together with the repetition of the 'balance' or 'talent' sign, significant of large business transactions, there is also, as in B, a reference to various forms of metal vases. For comparison with similar groups of B, and at the same time to give a general illustration of the contrasts presented

¹ E.g., the 'throne' sign on the Trullos ladle (see p. 683).

² See pp. 716, 717.

³ Cf. pp. 622, 623 above.

⁴ See p. 718 and Fig. 703.

by the tablets of Class A with those of the later Knossian series, a specimen of one of these is given below in Fig. 715 (p. 731).

Synopsis of Signary of Linear Class B.¹

The Table, Fig. 663 A, B, C, (opp. p. 684 below), together with the supplementary signs, present typical forms of characters of script noted by me in the course of a fairly exhaustive perusal and transcription of the clay documents of the Linear Class B.

Among the subjoined signs, the 'triangle' appears in two cases not in ligature, but as a separate character. This sign occurs in a single instance in Class A on a tablet from Tylissos.² The 'loop' (No. 2) exactly corresponds with a variety of the Egyptian 'noose' hieroglyph.³ Curiously enough, parallels to both these signs recur on the inscribed L. M. III 'stirrup-vase' from Orchomenos, the latter upside down.⁴ No. 3 a, in all probability a rudder, is found in a sign-group representing a personal name,⁵ and has a special interest from its recurrence in a variant form *b*, on a painted sherd of L. M. III date found in the Domestic Quarter at Knossos.⁶ The object greatly resembles the classical form of the rudder.

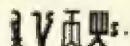
A full list might be taken to include—(1) Signs that could apparently be used with a phonetic value as syllables or even letters, as well as in a purely ideographic sense. (2) A certain number of ideographic characters that fit on to these, but are not here included, and are simply pictorial renderings of material objects like chariots and their parts. (3) A group of signs on inventories which stand in a special connexion with numerals, and

¹ It is right to mention that, pending the completion of the work on the site of Knossos, Prof. J. Sundwall, of Helsingfors, has, with the permission of the local authorities (but, so far as Knossos is concerned, without previous concert with those responsible for its archaeological exploration), made a study of the materials in the Candia Museum, including a large portion of the Knossian tablets. In the *fahrbuch. d. d. Arch. Inst.*, xxx (1915), p. 42 seqq., he has published a careful list of signs of Class A, and has since dealt with Class B. Various other articles of his on the Cretan script have also appeared. The results independently obtained by a competent student are always valuable, and these may also help to correct errors and unwarranted

conclusions made in the course of my own work. Differences must naturally arise, but, to avoid controversy, I have in the present publication relied entirely on my own researches over the whole field.

² I. Hatzidakis, *Τέλειος Μινωική*, p. 213, Fig. 19 (from my copy).

³ F. Ll. Griffith, *Hieroglyphs*, p. 44 (Figs. 41, 43). For this simplified form he cites Steindorff, *Der Grab des Mentuhetep*, Pl. III, and p. 18. This, however, is not a hieroglyph. The ordinary form occurs on Middle Kingdom coffins, with or near to weapons.

⁴ No. 49 in my hand list: .

⁵ See below, p. 739, Fig. 723.

⁶ See below, p. 738, Fig. 722.

relate to various properties. (See Tablets, Fig. 709, p. 726 below). A series of these has already received illustration in relation to the grain stores of the Palace. (4) An interesting ideographic series relating to overseers of crops, &c. (see Fig. 685, p. 701, below), specially applied to the superintendence of olive-groves (Fig. 699, p. 716).

Signs
used both
as ideograms
and
phonograms.

The signs
phonetically
used.

It is necessary to realize, in the case of both the A and B systems, that, in a considerable number of cases, where the signs were used in groups phonetically as syllables, they could also stand alone with their full value as ideographs. A large number of examples of this double usage can be cited.

The signs that were *ex hypothesi* phonetically used, including the animal forms represented in the above Table, are 73 in number, but of these eight are unique. The syllabary in ordinary use may have amounted to about 62 characters, as compared with about 85 signs of the same kind in the case of Linear Class A. The phonetic signs of Class B thus almost exactly represent in numbers three-quarters of those of Class A. Together with recent additions, the Hieroglyphic Signary may itself have amounted to over 150 characters. It will be seen, therefore, that, regarded as stages towards an alphabetic standard of 24 letters, the signary of Class B shows a certain advance on Class A.

Comparisons between Classes A and B.

Comparisons
between
Signaries
A and B;
new signs.

A glance at the comparisons between the two signaries supplied by Figs. 659 and 666 is sufficient to show that the common element in Classes A and B is large.

Questions may arise in individual instances, but it may be said that 50 types at least, though often divergent in style, are common to the two systems. A whole group of signs that form a characteristic feature of Class A are now omitted. Typical examples of these are given in Fig. 663, and it will be seen that, amongst those the origin of which seems to be traceable, they include the hand and forearm, No. 11, the 'sistrum', No. 36, the 'feline head', No. 40, the 'throne' (without sceptre), No. 53, the 'manacles', and the 'lyre', No. 78. On the other hand, a series of wholly new types now make their appearance. Among these (see Fig. 664) are the 'whip', B. No. 18, the 'single-edged axe', B. 20, the 'Sacral Horns', B. 22,¹ and the 'Throne and Sceptre', B. 27.

In other cases types usual in Class B occur as rarities in Class A. Thus **ⲗ**, which is certainly an alternative form of **Ⲛ**, and is exclusively

¹ Not given in Fig. 664.

used in the later script, is occasionally found in place of the other in Class A. In the same way the unrecognizable 'saw' sign, 38 *b* (Fig. 659) of Class A, is a degeneration characteristic of Class B. So, too, a sign, 21, different from

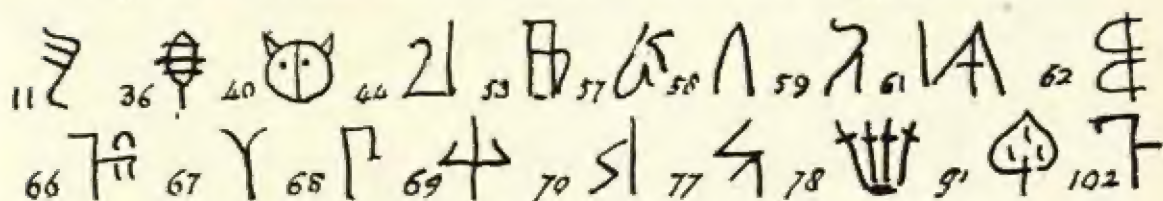


FIG. 663. CHARACTERISTIC SIGNS OF THE LINEAR CLASS A OMITTED IN B.

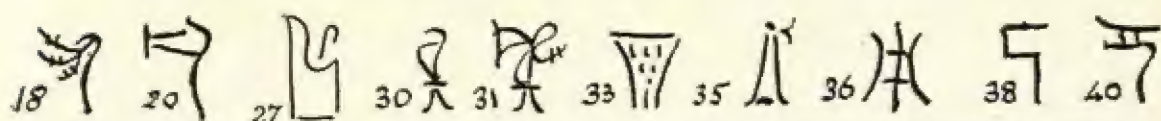


FIG. 664. CHARACTERISTIC SIGNS THAT MAKE THEIR FIRST APPEARANCE IN THE LINEAR CLASS B.

the ordinary 'throne' sign of this Class, and obviously corresponding with that of the late Palace tablets, 15, is found on the 'Trullos ladle'¹ in company with A script. This may be primarily regarded as a result of Knossian dominion over the neighbouring Arkhanes community. Otherwise, the 'throne' sign of the earlier class is invariably 15, no sceptre appearing.

Although Class B covers a somewhat later period and illustrates in many of its features a more fully developed stage in the Art of Writing, it cannot be regarded as simply a later outgrowth of A. It is on the whole of independent growth, though both systems largely go back to a common prototype. In one or two cases, indeed, such as notably in the 'flying bird', 32, No. 32 (41 of Class A), and in the 'leaf' sign, 28 (A. 60), the characters of B stand in a nearer relation to the pictorial prototypes. So, too, the 'single-bladed axe' and the 'horns of consecration' found in B and the Hieroglyphic series are not represented in A. Class B is freer and clearer in many ways than the other. Though it contains one character, 31, already fused into a compound shape from three separate signs of the series—1, 15, 2—it is not, as the other system, cumbered with an endless series of ligatures, of which specimens have been given above.²

Classes A and B largely from common source.

Advanced features of B.

Apart from the absence of ligatures, however, the general arrangement of the script remains the same, except that in the B system it is clearer. We note the recurrence of inventories or lists of possessions, with

¹ See, too, *P. of M.*, i, p. 626, Fig. 463.

² See p. 679, Fig. 662.

numbers preceded by quantitative characters often similar in form in the two groups. The numeration, as shown below, is practically identical, and the sign-groups are divided from one another in the same manner by linear marks, sometimes mere dots, sometimes short up-right strokes. In both cases the writing runs consistently from left to right.

Same language; personal names in common.

More than this, the language itself is identical. As will be seen from a small comparative selection in Fig. 665, the same personal names—authenticated as such on the B tablets by the association of the 'man' or 'woman' sign—recur in both series.

We have not here the indications of a violent intrusion at the hands of some foreign Power. Equally with the other, the new system is rooted in the soil of Crete itself and is part and parcel of its history. Rather, the evidence may be thought to point to a change of dynasty.

Analysis of Signs of Class B.

When we come to analyse the signs, 73 in number, given in the Table, Fig. 666, a good third may be thought to have been capable of a purely ideographic usage, in most cases directly connected with numbers. But it is difficult to lay down any hard and fast line of division. Certain signs, for instance, like the animal figures Nos. 68 to 73, though primarily pictorial and ideographic, are also included in sign-groups, where they may often belong to a personal name in which that of an animal forms part.

In the same way the 'ship' and other signs that recall a definite object are found in similar positions in name-groups. More will be said on this in a sub-section dealing with lists of persons.¹

It will be seen that, apart from certain more or less plain geometrical forms,² which go back to what may be called the primitive linear class—

Early alphabetic-form element.

¹ See below, pp. 709-11.

² As, for instance, 1-4, 15, 51, 54, 56.



FIG. 665. COMPARATIVE EXAMPLES OF NAME-GROUPS BELONGING TO CLASSES A AND B.



FIG. 666 (a). SYNOPSIS OF LINEAR SIGNARY B AND COMPARISONS WITH CLASS A.

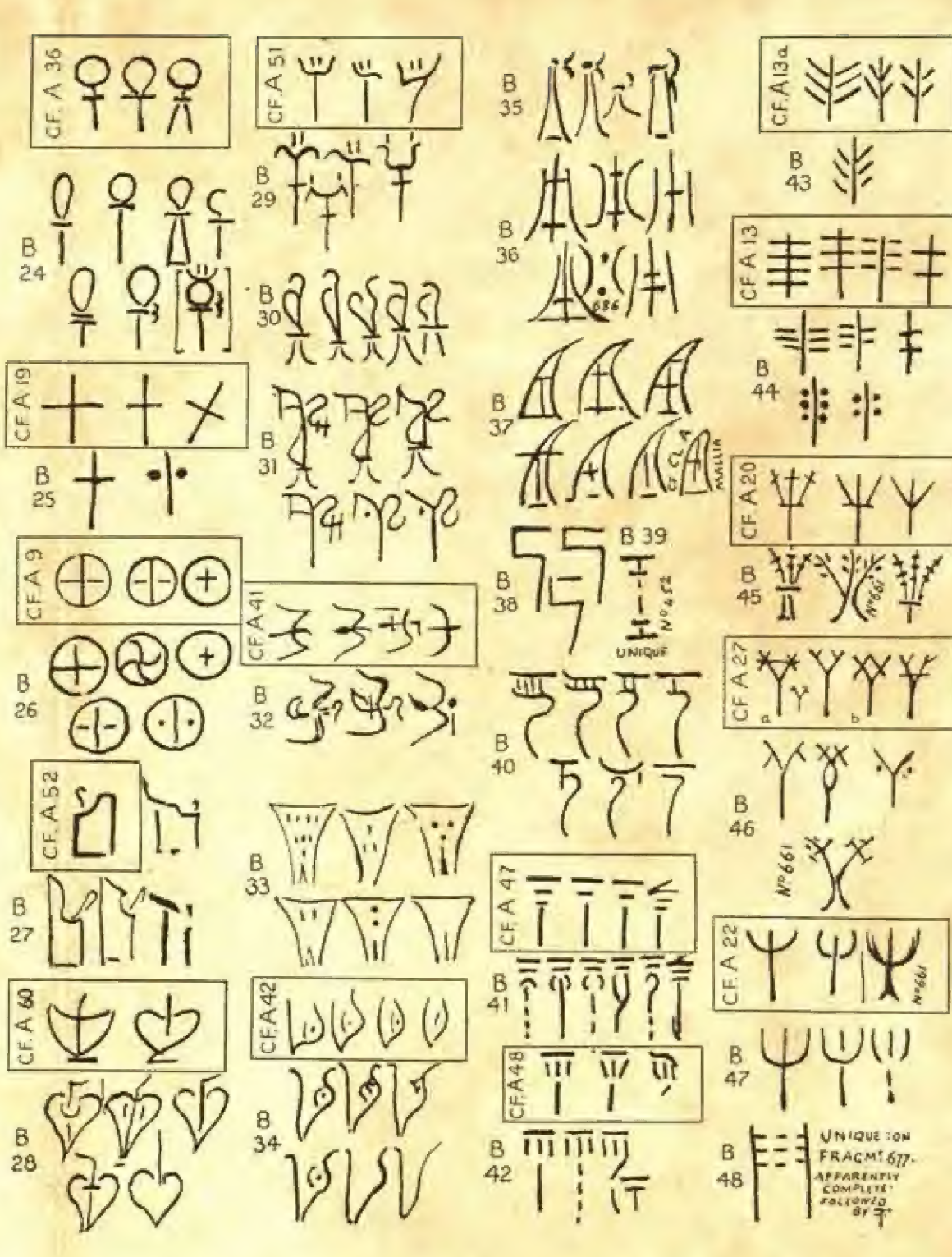


FIG. 666 (b). SYNOPSIS OF LINEAR SIGNARY B AND COMPARISONS WITH CLASS A.

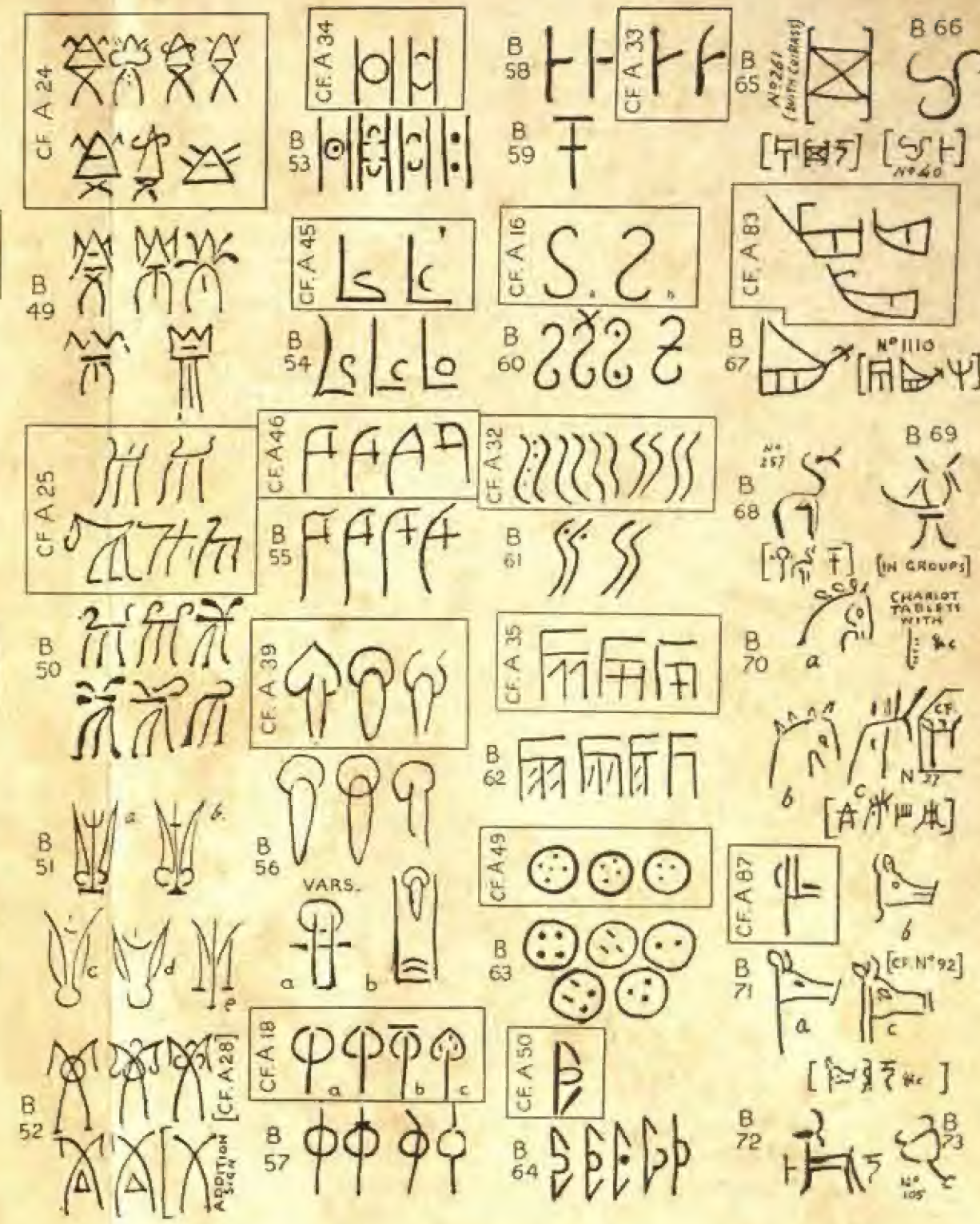


FIG. 666 (c). SYNOPSIS OF LINEAR SIGNARY B AND COMPARISONS WITH CLASS A.

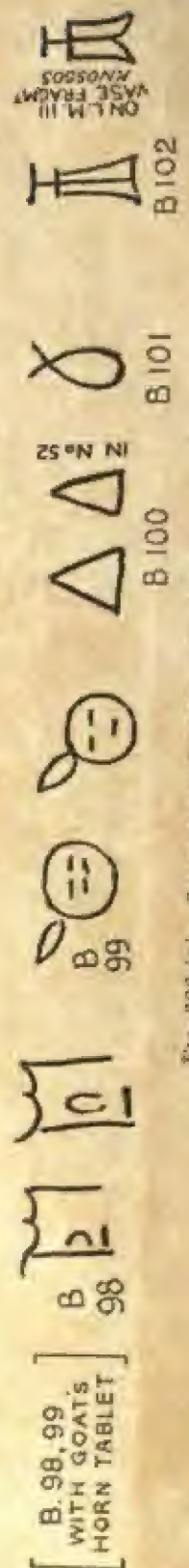
















FIG. 666 (d). SUPPLEMENTARY SIGNS OF CLASS B.



itself often so alphabetiform in its nature—the origin of a fair number of the signs of both the A and B scripts in many cases stands clearly revealed.

In the case of Class B there can be little doubt as to the head and neck being represented in , the single hand in , and the crossed arms in . The 'fence', , and 'gate', , signs, and the 'crescent moon', , speak for themselves. Among vegetable types are the 'tree' forms such as , the 'leaf', , and the 'lily', , while on the animal side we find the 'flying bird', , the head of the dolphin or tunny-fish, and others more purely ideographic, such as the forepart of the ox, . Several characters are interpreted by earlier forms found in the Hieroglyphic signary or in Linear Class A, and among such notably the 'saw', , No. 16, which in the more developed varieties here seen has now reached a stage past recognition. So, too, the origin of the 'double-axe' sign, , is assured by earlier intermediate forms, while the single-edged variety that now appears, , is on all fours with it.

Quasi-
pictorial
signs.




Hieratic and Egyptianizing Element.

As was natural at Knossos under what must be regarded as a régime of Priest-kings, the hieratic element in Class B is well marked.

Hieratic
and
Egyptian
element
in Script.





FIG. 667. EVOLUTION OF THE 'SACRAL IVY LEAF'.

A certain Egyptian ingredient is visible in the *ankh*, or life-sign, ; common also to Class A (No. 36). In two instances, moreover, what are clearly traditional forms going back to the hieroglyphic stage,  and the leaf symbol , have been curiously transformed into types of sacral association. It has been already demonstrated¹ that the 'leaf' sign with an inner curve, *d* in the type series Fig. 667, is 'crossed' by the sacral ivy-leaf

Reactions
of papy-
rus-wand
symbol
and
uræus.

¹ *P. of M.*, ii, Pt. II, pp. 484, 485 seqq. and Fig. 290 (repeated in Fig. 667).

symbol, , itself a decorative outgrowth of the papyrus-wand (*was*) of the Delta Goddess.

The  sign, which already appears in the hieroglyphic stage without any clue to its original source, supplies an interesting parallel. There can in fact be little doubt that under the form *c* of Fig. 668 it has been assimilated to the 'double *uraeus* staff' of Ishtar there shown, akin to that of Hathor, which so clearly reacted on a class of Cypro-Minoan cylinder types.¹

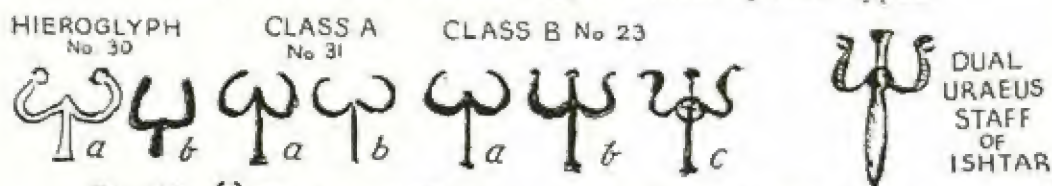







FIG. 668.  SIGN, SHOWING CONTAMINATION BY *URAEUS* TYPE IN CLASS B.

The single
edged
Axe; a
Syrianiz-
ing sign.

The 'double-axe' sign,  and , common to Class A, is of purely Minoan religious origin, and can be traced back through intermediate varieties to the hieroglyphic pictorial rendering of the sacred weapon (Fig. 669). It is clearly often used as an ideogram, and we may conclude that the native word that represented it was allied to the kindred Anatolian form of *labrys*. Supplementary to this is the parallel sign,  or , derived from the single axe type of the hieroglyphic signary. This, as already noted, is not found in the A class, but its revived vogue is in keeping with the importance of the Syrianizing single axe in the later Palace, though the sign itself preserves the older form.

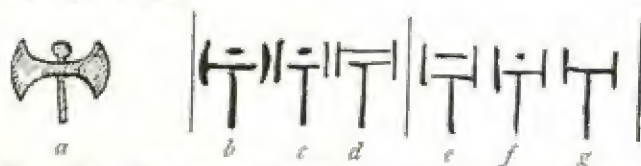



FIG. 669. EVOLUTIONS OF DOUBLE-AXE SIGN: *a*, HIEROGLYPHIC; *b-d*, CLASS A; *e-g*, CLASS B.

The 'horns of consecration',  (No. 22), so often associated in the cult with the Double Axe, which is also found in the hieroglyphic series



(No. 37), but is absent in the A series, now reappears.

The Throne and Sceptre.

Throne
and
Sceptre.

The connexion with the Priest-kings themselves is well marked by the frequent recurrence of what must be regarded as the throne and sceptre

¹ See my *My. Tree and Pillar Cult*, &c., pp. 50, 54 (*J. H. S.*, 1901, pp. 148-52) and Figs. 28, 29.

sign. The throne, , is high-backed (No. 27), like that in the ceremonial Palace chamber. The crook sceptre in front of its seat is a fit emblem of the 'Shepherd of the People',¹ a title which in Homer is most frequently attributed to Agamemnon. As a symbol of royalty it is borrowed from Egypt, where the sceptre as a sign of kingship was identical, from the days of the early dynasties, with the shepherd's crook.² The Egyptian 'throne' sign³  (which shows a thick back)

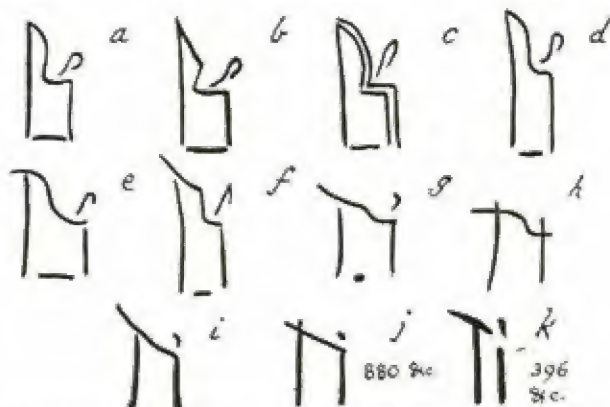







FIG. 670. 'THRONE AND SCEPTRE' SIGN OF CLASS B AND ITS DEGENERATIONS.

has a ledge in front serving as a stool for the feet, like that set before the almost Gothically moulded Knossian throne.⁴

The equivalent sign of the A series, with its lower part elegantly incurved and evidently representing a seat of honour, is not coupled with the sceptre. But, as noted above, on the inscribed stone ladle from Trullos by Arkhanes in the Knossian region the B form of the sign already appears. A curious 'double throne' sign or *bisellium* is referred to below.

The sign is used with an ordinary phonetic value, in any position, but it also appears as an ideogram, and with a determinative meaning. It is frequent before certain signs indicative of property, and connected with numbers, such as the 'flock' sign, , and its variants, and is similarly coupled with , and the 'cup', . At other times it is placed by itself before numbers.⁵ In certain places, again, it seems to stand apart before words or sentences.⁶ Where it is seen in an isolated position before a chariot,⁷ it surely indicates a royal owner. In a series of cases the formula  

¹ Ποιμὴν λαῶν. The title is applied more than fifty times to kings and chieftains in the Homeric poems (T. Day Seymour, *Life in the Homeric Age*, p. 95). Compare Isaiah xl. 11.

² F. L. Griffith, *Hieroglyphs*, p. 57 and Pl. III, Fig. 39. The crook and its variant forms was also a word-sign for flocks and herds.

³ See Griffith (*Ib.*, p. 54), and *Beni Hasan*,

V, Pt. III, Pl. VI, §6.

⁴ See below, § 116.

⁵ It is thus found at the beginning of my hand-list.

⁶ On 50 of my series.


⁷ On 230, 359, 683, 684, 685, &c. This formula is also twice repeated on the edge of 604.

occurs at the beginning of inscriptions and the two signs also often form the first element of what may be regarded as masculine names.¹ On the large tablet, 1552, what seems to be the name of an important female personage written in tall characters is followed in smaller letters by what looks like a title ending with the 'throne' sign as a determinative.²

The sign itself is of frequent recurrence on the whole series of Knossian tablets, and the gradual simplification of its form³, due to this constant repetition—as reproduced in Fig. 670—led to successive degradations, of which the final version might well be taken for 'Ti' in modern letters.

The Horned Head-piece.

Sign derived from the 'horned head-piece'.

Another interesting character seen in its developed form, , in the B series (No. 49), deserves special consideration in this connexion. This sign, which is common to all phases of the Minoan linear script may also with great probability be regarded as a symbol of official dignity.

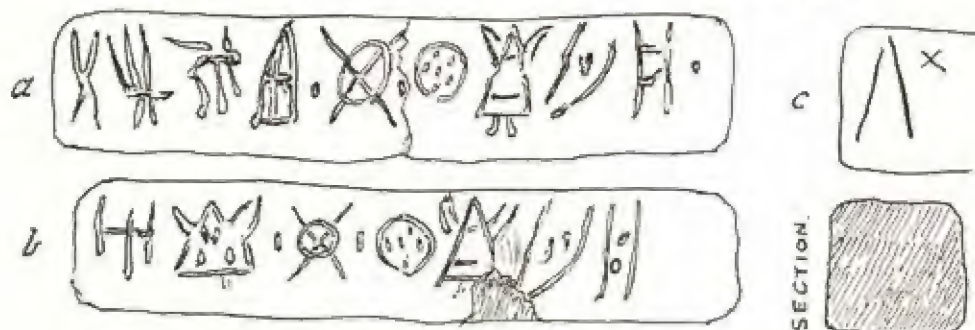
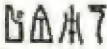






















FIG. 671. INSCRIBED CLAY BAR: MALLIA, M. M. III a.

In its most primitive aspect, of which we can trace the clear survival on some of the Hagia Triada tablets of the A class, it already appears on an inscribed clay bar of what must be recognized as the latest transitional class of the Mallia documents⁴ belonging to the earliest phase of M. M. III, here reproduced from my own copy (Fig. 671).⁵




¹  appears before a 'man' sign in the list of Nos. 1553 and 1558, and  in the same way on 1209. ( is in other cases coupled with the somewhat analogous sign .)

²                 


³ See, too, *P. of M.*, i, p. 626, Fig. 464.

⁴ Prof. E. Chapouthier's, *Les Écritures minoennes au Palais de Mallia* (1903), pp. 55, 56, L I a, L I b.

⁵ Made with the kind permission of Monsieur Chapouthier and the French Mission. It substantially agrees with Prof. Chapouthier's copy, but the terminal sign of both lines answers

The form of this document, a clay bar, is interesting since it represents a survival of the hieroglyphic tradition. Its initial X is also taken over from the same system, as well as a decadent variety of an animal's head, though the O crossed by an X is a unique feature. Otherwise, the script must be attributed to a primitive phase of the Linear Class A,¹ and the inscription has a special importance from the early examples that it presents of the  sign, here thrice repeated, (see Fig. 672 *a, b, c*). It twice follows the 'fodder' sign, , and at the beginning of line *b* it is grouped with a form of the Double Axe, , and appears under a variant aspect. That we have here some kind of peaked head-piece can hardly remain in doubt.²

These examples, which stand at the head of the comparative series belonging to the Linear Classes A and B, grouped in Fig. 673, bring us within sight of the pictographic origins of the type. Of the wide diffusion of forms of more or less conical horned helmets on the Anatolian side

more nearly to the , which it clearly represents, as does the terminal of line 2. The penultimate character seems to be identical with an 'animal's head' sign that recurs on the Mallia Tablets (see *op. cit.*, p. 33, Fig. 14). The little group of clay 'bars' to which this belongs is rightly attributed to the linear Class A of M. M. III, *op. cit.*, pp. 57, 58.

¹ Part of a clay bar from Palaikastro also presents script of this class.

² It is impossible to accept Chapouthier's ingenious suggestion (*op. cit.*, pp. 59, 60) that this sign is copied from a class of objects variously regarded as 'idols' or 'votive robes' or—as maintained in *P. of M.*, i, p. 175—'votive sheep bells'. The apex, visible in all phases of the sign, is there wanting. In its place is a

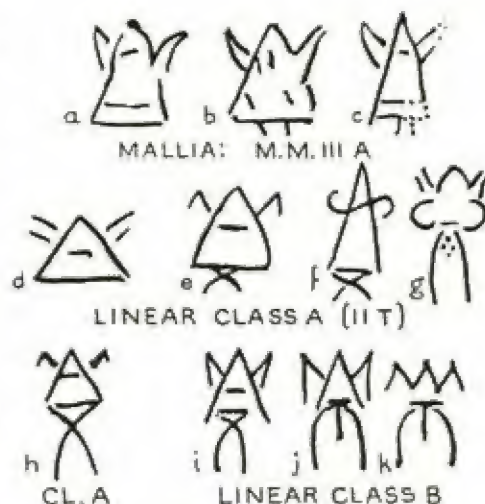


FIG. 672. 'HORNED HELMET' SIGN AND ITS DERIVATIVES. *j, k* REPRESENT A VARIANT FORM OCCURRING IN THE SAME SIGN-GROUPS WITH *i*.

handle (inset *a*) which later becomes a mere protuberance (*b*), and, in the original votive object, two holes for the suspension of a clapper (in the secondary type *b* placed on the side). A section showing *a* fitted with a clapper is here given (*c*). The chronological discrepancy may, indeed, itself be regarded as decisive. The votive objects in question are peculiar to M. M. I *a* deposits. So far as is known, the earliest appearance of the sign dates from the beginning of M. M. III *a*—some three centuries later.

Hittite
and
Minoan
parallels.



Horned
head-
pieces
Hittite
and
Minoan.

there is abundant evidence, and it is indeed a usual concomitant of figures of Hittite Gods and Princes (Fig. 673),¹ where four horns are often indicated. But, as equipped with two horns, Late Minoan Art affords two



FIG. 673. HORNED HELMET OF HITTITE PRINCES.



FIG. 674. WARRIOR WITH HORNED HEAD-PIECE ON FAÏENCE RELIEF: MYCENAE. (HINDER HORN RESTORED.)



FIG. 675. LENTOID BEAD-SEAL FROM VAPHEIO TOMB, SHOWING HELMET WITH RAM'S HORNS AND ROWS OF BOARS' TUSKS.

classical examples. The nearest parallel is on the fragment of a relief from a faience vessel from the Third Shaft Grave at Mycenae² on the head of a warrior covered to the neck with the rounded rim of a large shield (Fig. 674). In a more ornamented shape, with a crest above and curling ram's horns on either side, we see a conical helmet of the same general class on a cornelian lentoid from the Vaphcio Tomb³ (L. M. I 6), reproduced in Fig. 675, where the usual decoration of rows of boars' teeth is clearly suggested by the alternating rows of curves.⁴

A feature of this design, the two strings for tying on the head-piece curling up below and reappearing at the side, afford at the same time a reasonable explanation of the two short appendages seen beneath Fig. 672 *b, c*.

These rudimentary indications of the strings are themselves interpreted in the further evolution of the sign as short crossed supports of the 'camp-stool' kind, and are gradually assimilated to the longer 'legs' attached to other signs.

In this character, then, we may recognize another emblem of personal dignity. As a phonetic sign it is frequent in groups.

¹ *a*, Ivritz (Wright, *Emp. of Hittites*, Pl. XIV); *b*, Sinjiri; *c*, Tell-Basher (Hogarth, *Hittite Seals*, Pl. X, 313).

² Schuchhardt, *Schliemann's Excavations*, pp. 207, 208 and Fig. 198. The shield may very well have been of the ordinary Minoan S-shaped kind and not 'round', as there stated. In Ramesside Egypt the horned helmet was specially associated with the Shardana. On

the 'Warrior Vase' from Mycenae it appears on the head of two bearded warriors whose bags of provisions, we note, slung from their spears, seem to stamp them as marauders from a distance.

³ Tsountas, *Εφ. Ἀρχ.*, 1889, Pl. X, 37.

⁴ It seems possible that the dashes on the horned helmet, Fig. 672 *b*, may stand for a similar form of decoration.

The Numeration.

Except for the partial survival of the 'pellet' form of the decimal sign inherited from the hieroglyphic system, the numeration in Classes A and B is practically identical, though the fractions are clearer marked in Class A and the 10,000 sign only occurs in B (see Comparative Table, Fig. 676). Numeration of Class B practically same as of A.

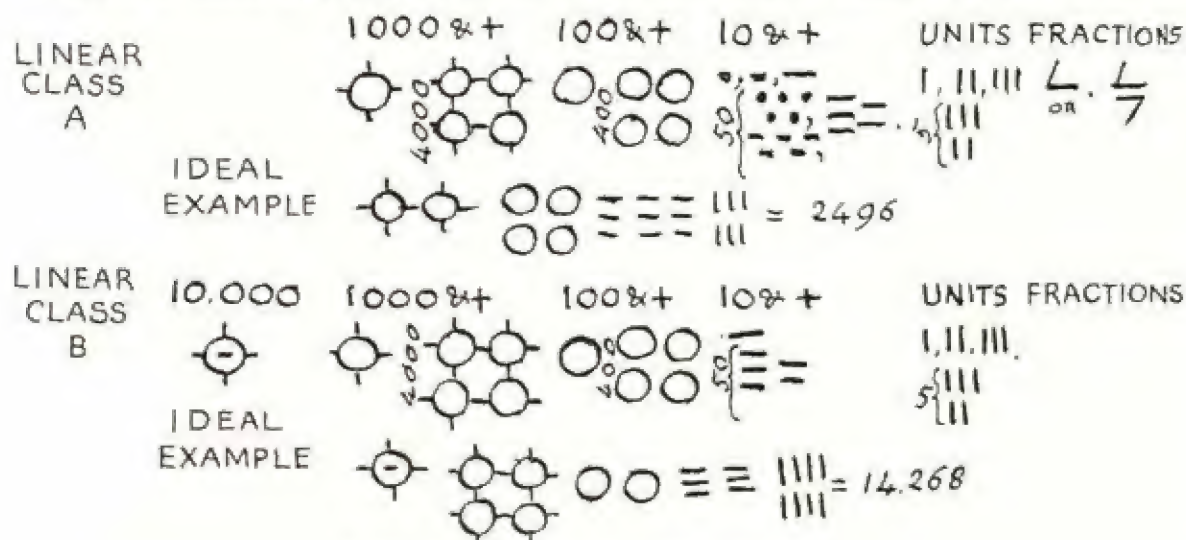
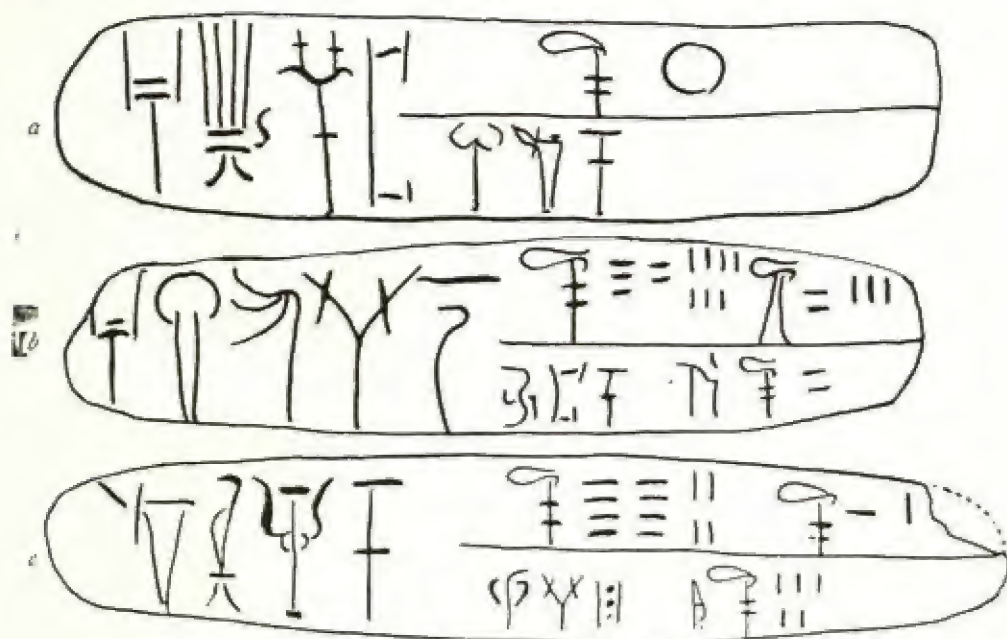
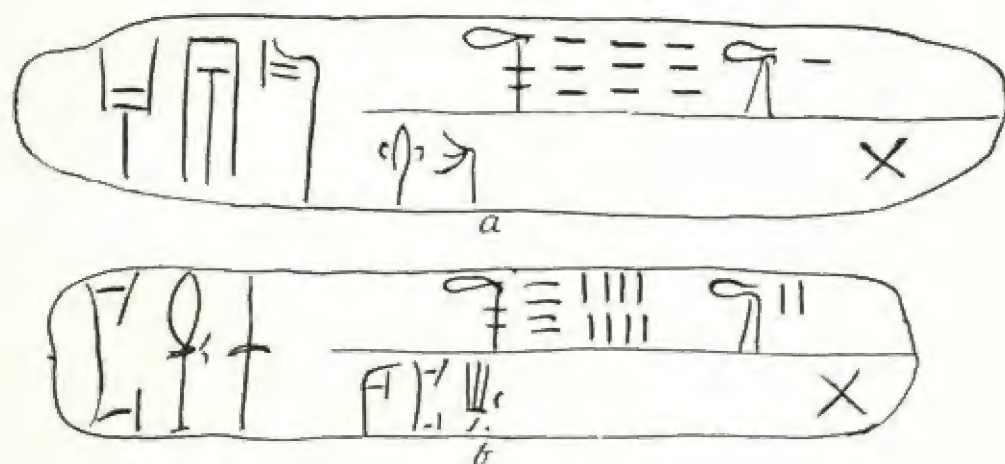


FIG. 676. NUMERALS OF CLASSES A AND B.

That we have to deal with a decimal system is clearly shown by the fact that the units are never more than nine in number, the same rule applying to the tens and hundreds.

Over and above this, a remarkable and recurring feature in the numbers attached to the clay documents proves the existence of a system of percentages. On a usual type in the form of a clay slip, after what we may regard as a personal name, and in characters the full height of the tablet, there appears a statement of account in two registers divided by a horizontal line. The upper of these registers shows one or both varieties of the 'flock' sign , as recognized below, followed by numbers. Sometimes, as in Fig. 677, *a*, a circle, indicating 100, represents the whole amount. More often the upper register shows a large proportion of 100 and the lower a fraction of it. These smaller amounts often follow what may be supposed to be the official signs such as and , and, in a principal degree, the 'throne and sceptre' sign . In all these cases it will be found that the upper and lower amounts specified together make up 100. A simple instance of this is given in Fig. 677, *b*, where the two sums of the upper register $57 + 23 = 80$, while in

Percent-
age Tab-
lets.

FIG. 677. *a, b, c.* 'PERCENTAGE' TABLETS.FIG. 678 *a, b.* VARIANTS OF PERCENTAGE TABLETS, SHOWING $\times = \circ$ IN SECOND REGISTER.

the lower register what appears to be the name of some official written in smaller letters than the initial group, is succeeded by the 'throne' sign, coupled with the barred 'flock' sign and numerals = 20, the whole sum amounting thus to 100. Here then the royal share seems to have been 20 per cent.

In the parallel example, Fig. 677, *c*, the two amounts in the upper register

are 84 and 11 = 95, while in the lower—following a small sign-group that may represent the name of an official, and associated with \mathbb{B} and the 'flock' sign—are ciphers = 5. Here the total again is 100, but the quota deducted is only 5 per cent. At times it sinks as low as 1 per cent. Occasionally the total amount is 50 or 200, the decimal character of the reckoning again and again manifesting itself.

A curious variety of these 'percentage' tablets is illustrated by Fig. 678, *a*, *b*. Here the total of the numbers indicating the round sum is contained in the first register, *a* giving $90 + 10 = 100$, *b* $48 + 2 = 50$. In these cases, therefore, the total sum dealt with is contained in the first line, and, in place of the minor percentage normally supplied in the second register, there appears, in each case, after what are probably name-groups, an X. It is clear that this must be interpreted not as the *x* sign of modern arithmetic, but as simply 0, since nothing was left over.

Signs of Addition.

A good example of addition is supplied on which numbers follow what, from its general appearance, has been here described as the 'banner' sign. In this case the total sum—40—is marked on the edge of the tablet, preceded by two signs that appear on others as an indication of addition at the end of lists (Fig. 679). The constant initial sign of the total of amounts is $\overline{\text{T}}$. This, however, is often followed by the 'single-edged' axe sign Y or this coupled with X to which Y seems to be closely related.

A striking example of addition sums is afforded by the large tablet, Fig. 686 below, containing lists of names.

EXAMPLE OF ADDITION	{	$\text{F} \text{Y} + \text{H} \oplus \square 1$	= 1
		$//// \oplus \square \equiv \text{III}$	= 37
		$\text{G} + \text{V} \square 11$	= 2
<hr/>			
ON EDGE OF TABLET		$\overline{\text{T}} \text{Y} \square \equiv$	= TOTAL 40
OTHER TOTAL SIGNS		$\overline{\text{T}} \text{H}, \overline{\text{T}} \text{H} \text{X}$	

FIG. 679. EXAMPLE OF SIGNS OF ADDITION.

§ III. TABLETS OF THE LINEAR SCRIPT B (CONTINUED): METICULOUS BUSINESS METHODS: LISTS OF PERSONS AND INVENTORIES OF POSSESSION.

'Minos' as a bureaucratic organizer as well as law-giver—Corroboration of Greek tradition; Elaborate business methods; Inventories docketed; Methodical disposition of tablets—Aristides 'the Unjust'; The Grammarian at work—conventions common to A and B; Bulk of Tablets inventories and lists of persons; Example of exceptional document; Human figures—'Man' sign; 'Overseer' sign; Large tablet with lists of men—elegant inscription of similar kind; 'Woman' sign—lists of female names; Signs indicative of children; The name-groups—with and without 'man' or 'woman' sign; Ideograms in personal names—interest of 'goat' sign; 'Ship' and 'rudder' in name-forms; Male and female terminals—evidence of declension; Correspondence of names in Classes A and B; Linguistic unity—extends to Cyclades; Olive culture—symbol of superintendence; Saffron culture and cereal signs; Flocks and herds; Swine and horses; 'Horned cattle' and 'flock' signs—indications of sex; Signs specially connected with quantities or numbers; Pictorial figures of uncertain meaning; Deposit of 'Vase Tablets'—comparisons with hoards of metal vessels and relation to Central Palace Sanctuary; Early B tablet with 'rhytons' and 'Vapheio' cups; Services of vessels; Signs of script relating to vessels; Hoard of tablets referring to clay 'stirrup vases' marked by 'Double-Axe' character; Stratigraphic interest of deposit—L. M. IIIb 'stirrup vases' on clay floor above.

'Minos' as bureaucratic reformer.

THE evidence, supplied by these clay documents, of conventions due to some school of scribes and grammarians, and their meticulous arrangement, fit in well with the traditions taken over by the Greeks regarding the great Minoan ruler. Minos, according to these, was not only a lawgiver, but was himself both a great dispenser of justice and a bureaucratic reformer, after the manner of the Egyptian Sesostri¹, who, for his convenience, divided the population into three distinct classes—soldiers, burghers, and husbandmen. Even more perhaps than the beauties of Minoan Art must this highly perfected inner organization have struck the primitive Greek invader.

The tablets themselves, as we have seen, were grouped according to the particular subject of their contents. These are in many cases made

¹ Aristotle, *Pol.* vii. 10.

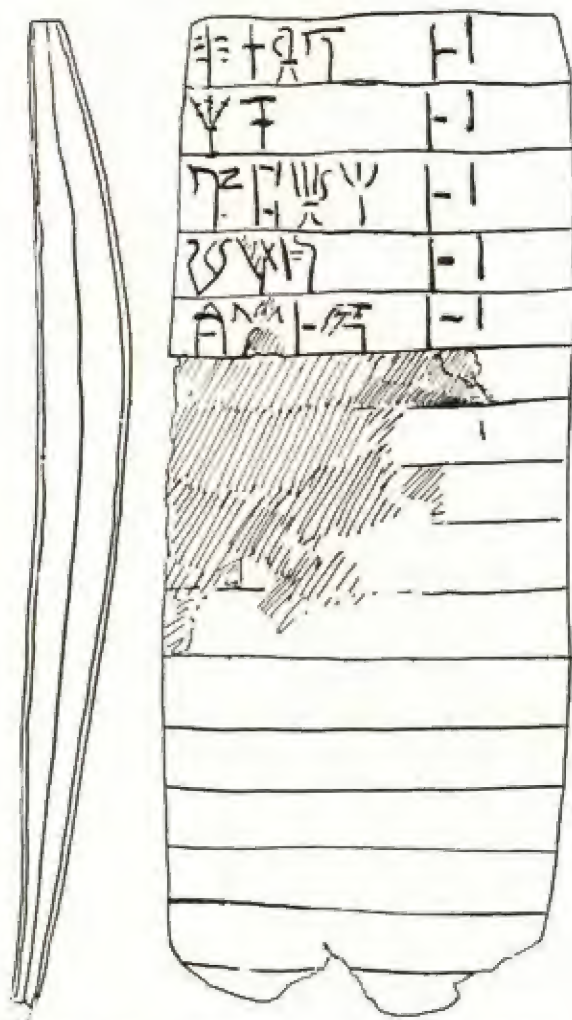


FIG. 680. TABLET SHOWING INCISED LINE FOR ENTRIES.

clear by the pictographic designs on their margins, and accompanied by special formulas. The tablets, for the most part, were then stored in wooden cases, which would naturally have been labelled with ink-written inscriptions.

The whole surface was marked out with cross-lines as a preliminary to the insertion of the written records, which was often, as will be seen from Fig. 680, only partly filled in. Evidently the tablets were supplied in this state to the clerk, like ruled sheets of paper in a modern business office.

In one quite exceptional case the tablet, which is of the elongated 'slip' form, is scored by vertical in place of horizontal lines (Fig. 681). It is thus divided into six compartments,¹ the last blank, the first—rather wider than the others—containing presumably the name of the principal person concerned in larger characters.

Tablets lined for inscriptions.

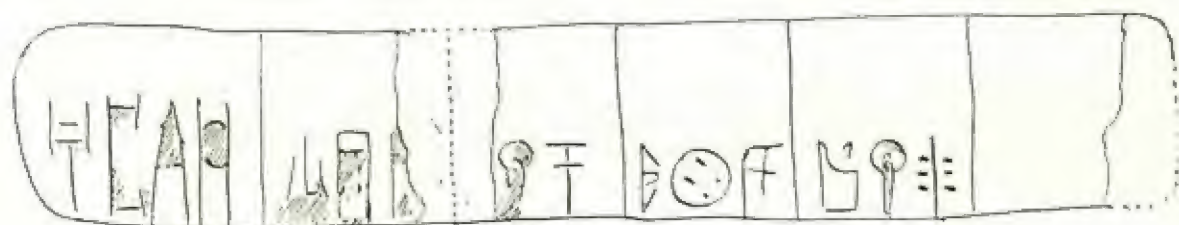
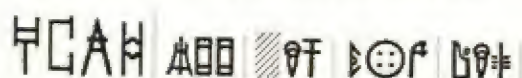


FIG. 681. EXCEPTIONAL TABLET SHOWING VERTICALLY DIVIDED SECTIONS ($\frac{9}{10}$).

¹ Assuming that the arrangement in the small lacuna was symmetrical with the rest of the tablet as restored in Fig. 681.

As restored, the inscription would read as follows :




Contrast with earlier forms of clay documents.

The documents of the Hieroglyphic Class had been for the most part perforated bars or clay 'labels', and the tablet-shape proper is of rare occurrence. Solitary specimens from Knossos and Phaestos show a rectangular outline of greater width than height.¹ Among those presenting the linear Script A the tablet-form is general; sometimes, as Fig. 647, p. 660, above, practically square in shape, but usually oblong, of greater height than width, and with the edges slightly rounded. This type, often on a considerably larger scale, is followed in the last described Knossian class. Some of the tablets—as is shown below²—were extraordinarily small.

Business Methods and Meticulous Arrangement of the Records.

Elaborate business methods.

Another interesting document, in which the 'banner'-sign is repeated (Fig. 682), gives an excellent idea of the business-like methods of the scribes who drew up these inventories. It is rapidly written, in a style that shows great practice and character, the secondary details being inserted in signs and numbers so microscopic that in the original they are best seen through a magnifying glass. Some idea of these niceties may be gathered from my own transcript (Fig. 682), which, however, is somewhat enlarged. No clear evidence of the subject of the inscription is forthcoming, but the 'saffron' sign is contained in the group  of line 2, while, in another, near the end of the same line, we recognize the 'superintendent' sign in a similar position.

Here, again, a summary account of the contents of the document is inserted on the edge of the tablet (Fig. 682, *b*). This docketing on the edge itself suggests that in these cases the documents had been packed together like books on a shelf.

Docketing of inventories on edge of tablet.

It touches like the above that best illustrate the highly methodical administrative methods in vogue throughout the closing period of the Great Palace. It is of a piece with the precautionary details such as have been already exemplified, not only by the securing of documents or packages of value by means of clay sealings impressed by official signets, but by the

¹ See *Scripta Minoa*, i, p. 179, P. 120 and 121. One from Knossos is about 7 cm. ($2\frac{3}{8}$ in.) wide by 4.8 cm. ($1\frac{7}{8}$ in.) high. The other, from Phaestos, is about 8.5 cm. ($3\frac{3}{8}$ in.) wide and 4.4 cm. ($1\frac{1}{2}$ in.) high. None were discovered at Mallia.

² See p. 709, Fig. 692.

countermarking of the impressions themselves with graffito signatures, and—as an additional measure of control—by their countersigning and endorsement in a similar manner. On the tablet, Fig. 682, the lettering itself is of four sizes.

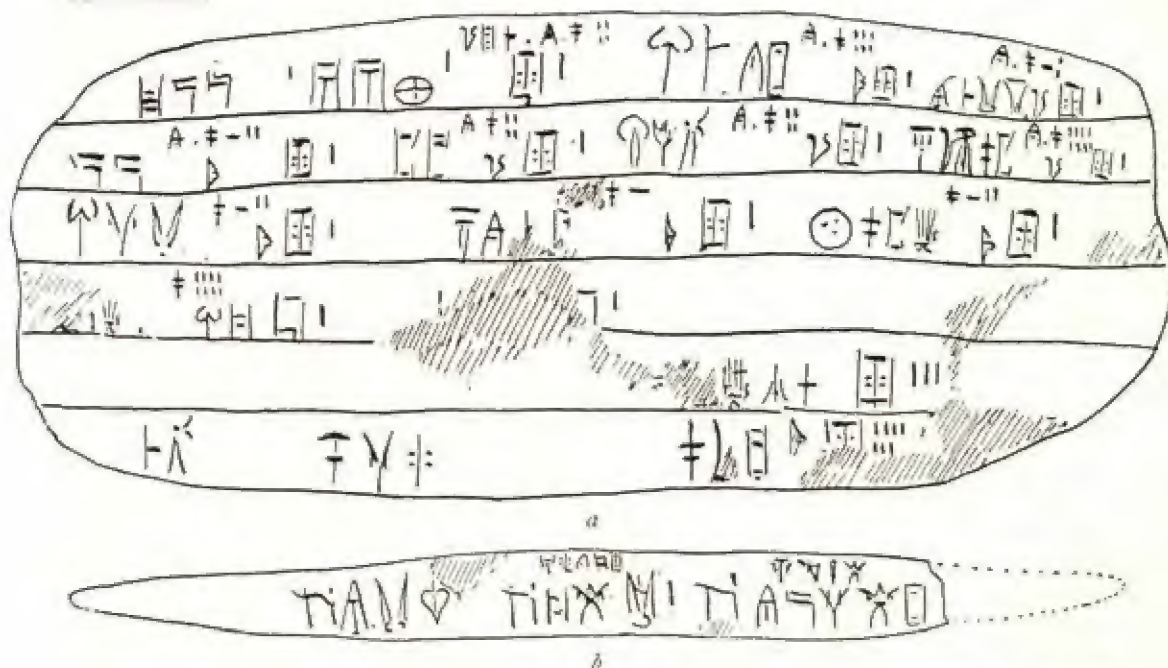


FIG. 682. *a*, TABLET WITH 'BANNER' SIGN AND \equiv REPEATED. *b*, INSCRIBED EDGE OF TABLET.

Methodical Disposition of Tablets: Aristides the 'Unjust'.

The methodical disposition of the clay archives in the 'House of Minos' was destined, indeed, to bear fruit in modern times, and even to serve the ends of justice. A series of tablets, clearly purloined from Knossos, had made their appearance at Athens, and inquiries made connected their removal with an oversea trip of one of our workmen, who had, just before, left the excavations. On looking through the inscriptions of the stolen tablets I observed a formula specially associated with the deposit of tablets found in Magazine XV, and an examination of the day-books showed that Aristides—such was his name—had been working in that Magazine before the date of his hasty departure. On his return to Crete he was arrested, and the evidence supplied by the Minoan formula was accepted by the Canea Tribunal. Aristides—the 'Unjust'—was in consequence of this condemned to a heavy fine and three months' imprisonment.¹

Aristides,
the 'Un-
just'.

¹ See, too, *Scripta Minoa*, i, p. 46.

Conventions common to both Class A and B.

Elaborate legal system reflected.

The grammarian at work: conventions common to A and B.

Meticulous bureaucratic methods such as the above reflect a legalized administration and Treasury devices of a highly modern kind, such as never before were seen on any fraction of European soil. In the inscriptions of Class B, and the elaborately artificial system implied by many of the forms of the signs themselves and by their relations to values and numbers, we must recognize the work of official grammarians of outstanding ability.

In this connexion we observe common conventions, imposed in this way, adopted by both Classes A and B. This has been already exemplified by the identical system of numeration adopted, different from that of the Hieroglyphic series; it is well illustrated in detail by the common use of the 'banner' sign for the insertion within it of characters—in some cases the same in both Classes—such as the 'flying bird'.

Tablet of Exceptional Class.

Bulk of tablets in inventories and lists of persons.

Example of exceptional document.

The great bulk of the clay documents, as already stated, are of a business character, such as inventories and lists. But there exists a small class of exceptionally large tablets, sometimes inscribed on both faces, and clearly of a different purport. Here the signs, denoting various properties, and those referring to individual persons, are conspicuous by their absence. In such cases, as on the large inscription, my copy of which is given in Fig. 683,¹ we may reasonably suppose that we have to deal with a contract or an official pronouncement that may well have borrowed its wording from an actual enactment of the great Law-giver.

This document is written in bold characters, originally about 67 in number,² and consists of nineteen or twenty words, composed of 2 to 4, or 5 signs, with the usual upright strokes between. It is divided into three paragraphs, the first ending in line 2, the second in line 6, and the conclusion in the eighth line. Eight or nine characters are lost on the left margin.

Here there is no quasi-pictorial sign referring to possessions, nor any indication of numbers. The characters representing persons of the male or female sex are also wanting. At the same time the recurrence of the 'hand'

¹ For a photographic facsimile see *Scripta Minora*, i, p. 49. The inscription was found with the large deposit of tablets in the Northern Entrance Passage, a fair number of which relate to the Royal Stables and Arsenal.

² The second sign (here completed) is fairly certain. The fragmentary sign at the beginning of line 8 may be either 2 or 7.

sign as a terminal at the end of each of the last four lines raises a suspicion

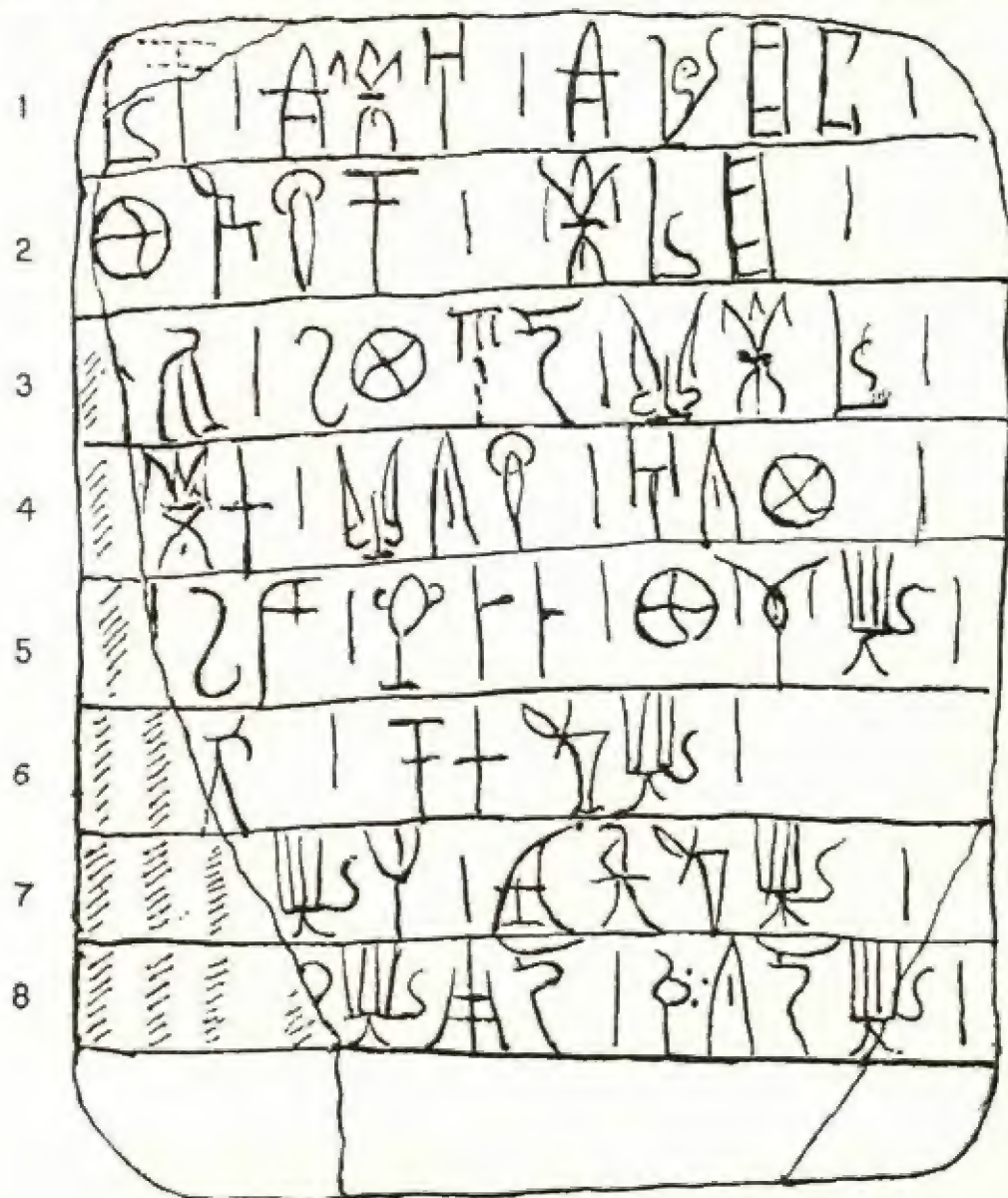


FIG. 683. LARGE DOCUMENT WITHOUT NUMERICAL INDICATIONS. (†)

that such may be included, since this sign is amongst those not infrequently found at the end of names marked both by the male and female figure.

In a case like this it is, at any rate, not improbable that the document may consist of some official warrant, involving, it may be, a legal formula.

But the overwhelming proportion of the tablets relate to inventories of possessions and apportionments of accounts in which these are involved, or to the lists of names of persons of both sexes, accompanied by the 'man' and 'woman' signs.

Ideographic and Quasi-pictorial Signs.


To the signs that apparently have a phonetic as well as a purely ideographic or pictorial value must be added a second group of characters—such as those depicting animal forms—the use of which seems to have been of the latter class, with some special exceptions in the case of the elements of personal names.



Human Figures: Ideogram of Superintendence.

Human figures:
'Man'
sign.

The first place in the group may be claimed for the human figures, of which specimens are given in Fig. 684. These, as will be seen, are of both the male and female sex (B. 74, 75). The half-squatting attitude characteristic of some of the 'man' signs is, as shown below,¹ of very early tradition, and may even indicate a hieroglyphic Egyptian influence. The long triangular outline of the lower part of the 'woman' sign, on the other hand, sometimes with a dividing line in front, rather reflects very late Palatial fashions of Oriental importation. On a version that appears on a sealing of Class A we recognize, on the contrary, the short-skirted, flounced apparel of transitional M. M. III—L. M. I fashions.²

Overseer
sign.


In what seems to be a direct relation to the oversight of fields and crops there appears at the head of the inscriptions on the 'cereal' class of tablets already referred to,³ a more specialized form of both the 'man' and 'woman' sign (Fig. 685), in which the figure rests one hand on a crooked staff, and holds out the other in the attitude of superintendence. These official signs, as applied to both sexes, make their appearance several times in groups, such as .⁴

A parallel phenomenon in the case of the sign-groups that appear before the ordinary 'man' sign , B. 74 of the list, is the occurrence of the 'throne' sign  in them as part of the phonetic composition of names.

¹ See below, p. 706, Fig. 688.

² See above, p. 623 and Fig. 609, *b*, *c*, *d*.

³ A similar costume, but with a longer flounced skirt, is also reflected in compound female signs of Class A (No. 90 of the signary, p. 677).

⁴ In No. 1433. Cf., too, No. 604. In three cases it follows  and is perhaps used ideographically.

'MAN AND WOMAN' SIGNS



'WOMAN' SIGN

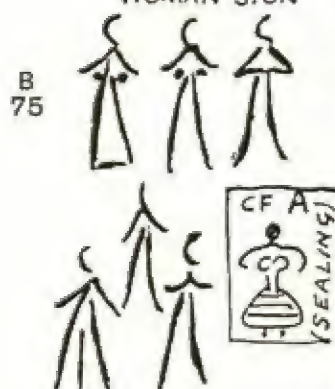
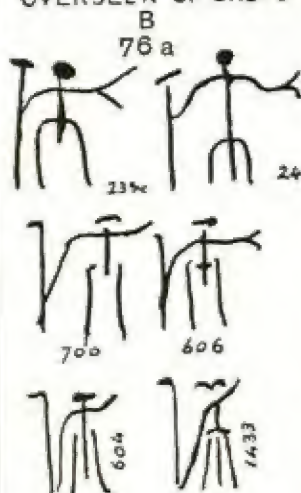


FIG. 684. HUMAN FIGURES.

OVERSEER OF CROPS



IN CEREAL GROUP:
PRECEDED BY
(N° 520, 700) (1433)
& (11) (604)
I COUPLED WITH
COMPARE A 88

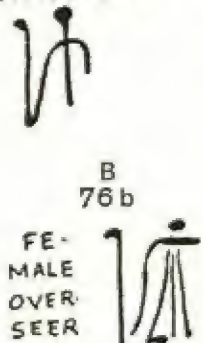


Fig. 685. SIGNS OF SUPERINTENDENCE.

The inclusion of this symbol of dominion in personal names suggests comparisons drawn from many races, such as Melchizedek or Abimelech, Vercingetorix, Hilderic, or Theodoric, Oswald, and Wladimir. Its inclusion at any rate suggests a royal lineage, just as the sign of superintendence seems to indicate high bureaucratic connexions.

Such forms then may certainly be taken to weigh against the opinion, sometimes expressed, that the lists of names found on the tablets relate to slaves. It may be further observed, indeed, that the names of slaves or captives might largely refer to individuals of foreign stock, while the sign-groups themselves fit in with the ordinary Minoan vocabulary.

'Throne' and 'superintendence' signs in personal names.

Large Tablet dealing with Male Persons in Three Groups.

Of tablets dealing with lists of persons of the male sex, by far the largest example is that, reproduced on a somewhat reduced scale from my copy, in Fig. 686. It is 26 cm. (10³/₈ inches) high by 15.5 cm. (6³/₈ in.) in breadth, and presents 24 lines of inscription. The list itself is divided, at the 11th, 19th, and 20th lines, into three sections, and each of these is prefaced by a separate heading. Each paragraph bears at its end a statement of

Large tablet with lists of men.

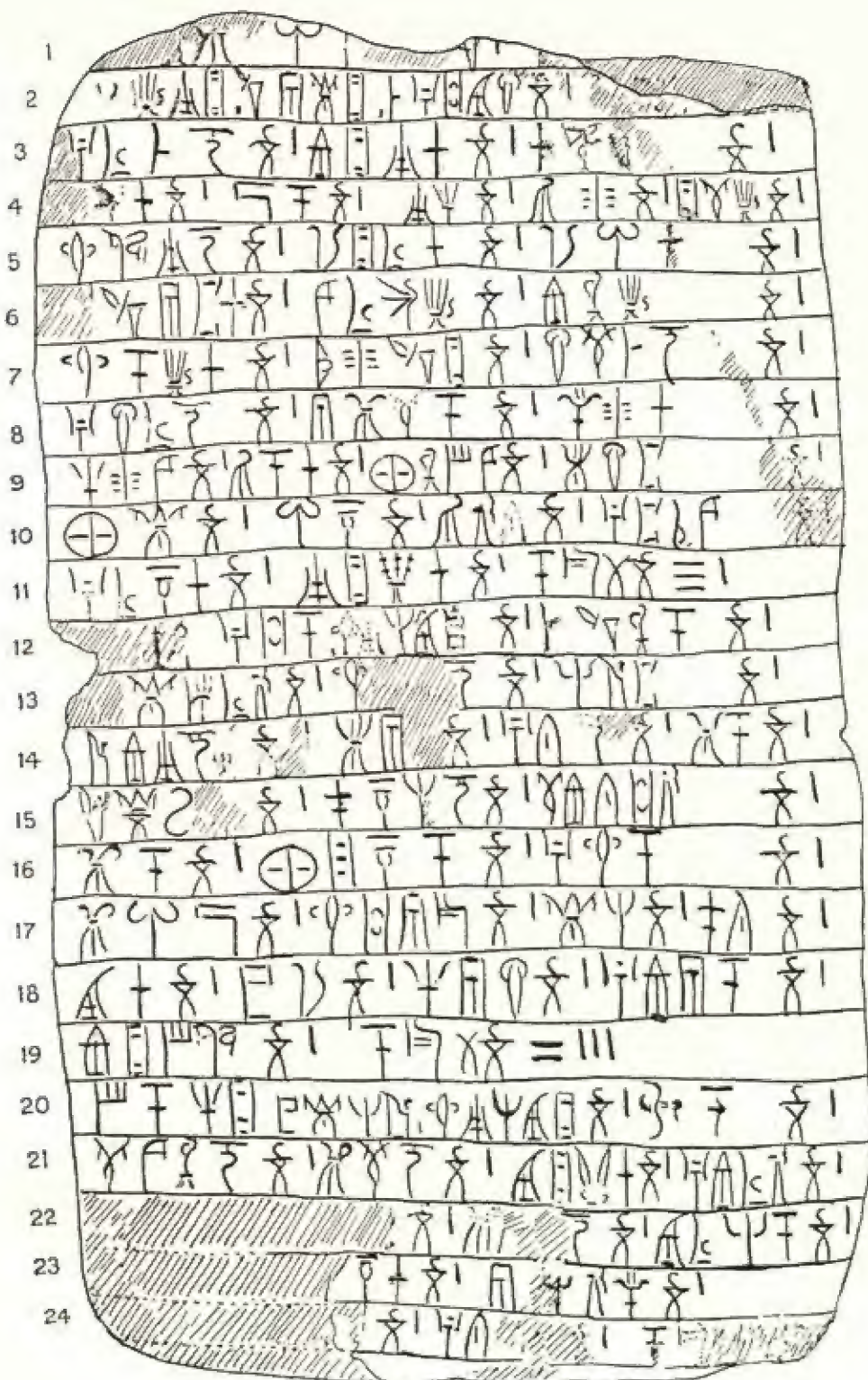
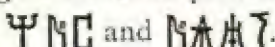


FIG. 686. LARGE TABLET SHOWING LISTS OF MEN.

An interesting grammatical detail is also noticeable in these headings. The sign-groups are in each case separated by a very small upright mark on the lower border of the register. After the 'man' sign, on the other hand, there appears the usual dividing stroke, somewhat elevated above the lower border.

That an individual concerned with the third heading occupied some official position is itself made probable by its second group terminating in the 'throne' sign. This sign also forms part of the names of two persons in the preceding paragraph .

Certainly, in this document bureaucratic method is everywhere apparent; in its heading and the prefatory formulas of its paragraphs; in their clear distinction from one another and the careful addition sums. To these we may also add the variation in the size of the characters—so that in paragraph 3 we have larger and smaller type—and the graduated scale noted in the punctuation, showing a truly modern advance in the Art of Writing.

Contrast with this an early Greek inscription—with all the advantages of alphabetic development but entirely devoid of espacement or punctuation—the words running into one another, and the sentences unseparated! In the Greek case it is a foreign system, imperfectly assimilated by barbarians of yesterday. A Minoan inscription, on the other hand, though its signary had not yet reached the alphabetic stage, represents a gradual and continuous growth on Cretan soil, *pari passu*, through long generations, with that of a great indigenous civilization the subtleties of which it fully reflects.

The great tablet was found on an upper level overlooking the Hall of the Colonnades, together with broken remains of others on a smaller scale, and was clearly derived from the neighbouring Room of the Archives.

A good, though more fragmentary, example of lists of male personal names is reproduced from my copy in Fig. 687 *a, b*.¹ Perhaps, two-thirds of the tablet is preserved, with some lacunas, and face *a*, where the characters are larger, may have consisted of 9 lines of inscription. On face *b*, however—with the object apparently of securing sufficient space for carrying over the remainder of the list—after the first line (which nearly answers to the scale of *a*) the registers become narrower. The whole inscription on this face may have originally amounted to 12 lines.

The initial section of face *b*, shows a whole sign-group, succeeded, after a mark of division, by another (incomplete) without any intervening 'man'

Modern
methods
con-
trasted
with
Greek.

Elegant
inscrip-
tion with
similar
lists.

¹ For photographic copies see Suppl. Pl. LXII.

FACE a.

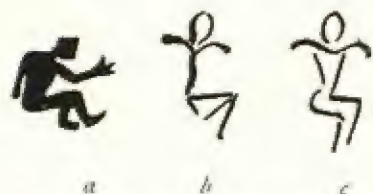
FACE A

FIG. 687 *a, b*. TABLET WITH ELEGANT SCRIPT CONTAINING
LISTS OF MEN.

of 𐀀 at the end of male-names is also notable elsewhere: the group 𐀀𐀀𐀀 is found with the 'man' sign attached on another tablet.¹ The 'throne' sign at the beginning of 𐀀𐀀𐀀 affords a further indication that the persons listed on these tablets were not as a rule of servile condition.

The elegant style of this inscription at once strikes the eye. It is one of distinct group marked by the same 'Court hand'. A feature of this group is the conventional half-seated attitude of the 'man' sign itself, which suggests an archaic tradition, since it curiously recalls a crouched human type found in the hieroglyphic class (Fig. 688, *b*).

FIG. 688. CROUCHED MALE TYPE: ITS ARCHAIC TRADITION: HIEROGLYPHIC CLASS *a*. MAN SIGN ON TABLETS, *b*, *c*.



An examination of 136 groups followed by the 'man' sign, including the legible examples on the tablets, Figs. 686 and 687, and clearly representing personal names, shows that 20 consist of two characters, 65 of three, 45 of four, 5 of five, and 1 of six.

Lists with Female Names.

Of inscriptions connected with the 'female' sign (No. B. 75 of Table Fig. 684), the most important is that of which my transcript is reproduced, slightly enlarged, in Fig. 689.² The tablet, which is beautifully inscribed, is practically complete, and consists of fourteen lines.

It contains a double list with a statement at the end of each of the total number mentioned. It is thus analogous to the large tablet, Fig. 686 above, repeating the 'man' sign, though unfortunately in this instance, owing to lacunas, it is not possible in either list to check the addition sums arrived at. That at the end of the inscription is entirely broken off. The calculation is further complicated by the fact that in more than one case the 'woman' sign, though accompanied by only a single name, is followed by numbers referring to more than one person. Thus the group 𐀀𐀀𐀀 , which

¹ Face *b*, line No. 837 of my hand-list.

² Face *b*, line 6.

³ This tablet formed part of an important hoard found about 30 cm. below the surface on the upper level of the XVth Magazine. With it was found a seal impression, countermarked

and countersigned, depicting a bull attacked by two dogs, a large one showing two bulls, and a fragment of another presenting the Lions' Gate scheme. Cf. *B. S. A.*, vii; *A. E.*, *Report*, Knossos 1901, p. 43.

occurs alone with the 'woman' sign on other tablets with a single cipher, is here followed by the number 7. In other cases we see 2, or 4.

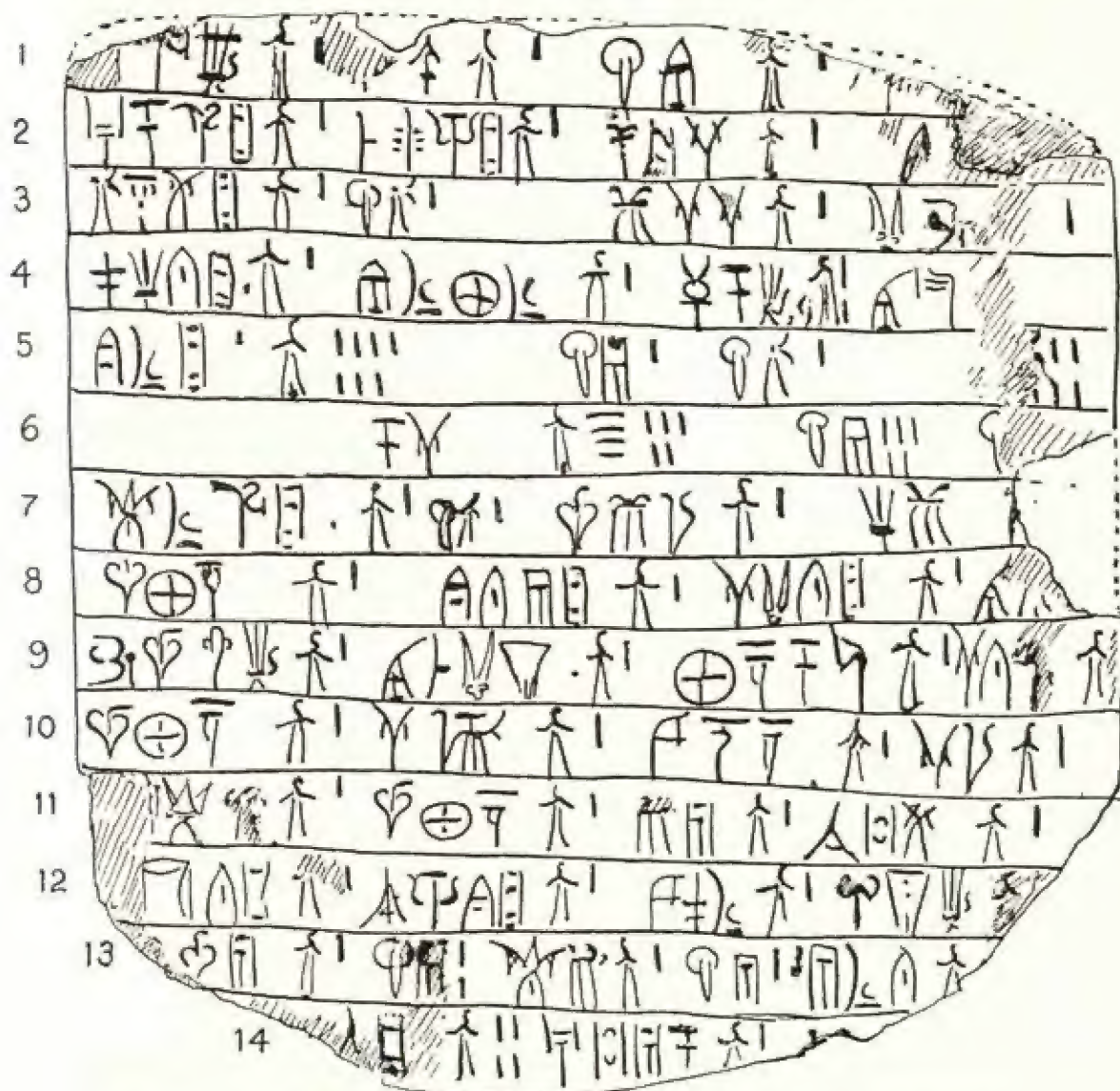


FIG. 689. TABLET OF 14 LINES CONTAINING TWO LISTS OF WOMEN AND, APPARENTLY, CHILDREN, WITH SIGNS OF ADDITION. (ENLARGED $\times \frac{1}{2}$)

The 'woman' sign is traceable thirty-eight times on this tablet, and we may infer that it was originally repeated in seven other places. It is noteworthy that the group $\text{𒀭} \oplus \text{𒀭}$ occurs three times before the 'woman' sign

in the second list of the tablet.¹ Here we may infer that it applied to different individuals of the same name. At other times where, as not infrequently happens, a name recurs on more than one tablet, we are free to suppose that it may belong to another person.

The addition formula here FY is an abbreviation of that on the large tablet, Fig. 686, with the lists of male names. It is followed by the 'woman' sign, and the total number 46.

Signgroups indicative of Children of Both Sexes.

Signs
indica-
tive of
children.

It is specially to be noted that in the addition sums seen on this tablet—as in a series of parallel documents—the 'woman' sign is coupled with

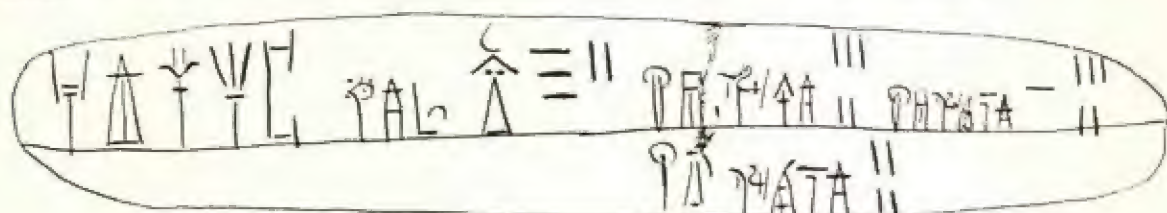


FIG. 690. TABLET WITH SIGNS INDICATING WOMEN, AND APPARENTLY, CHILDREN OF BOTH SEXES. (3)

two other groups FM and Ff , indicative of separate categories.² On the tablet, Fig. 690, we see these categories further differentiated, in the case of the first, by supplementary formulas FfA and FfA , which are of frequent recurrence in the same connexion.

The most natural conclusion seems to be that we have here to deal respectively with male and female children. The common element is here the F , which elsewhere stands alone in connexion with numbers. Of the M sign, with which it is coupled in the first group, and which therefore would appear to have a masculine signification, all that can be said is that it is itself apparently the derivative of a façade or porch of a building.³ With regard to the qualifying formulas FfA and FfA associated with FM , it is worth while observing that in the modern Cretan dialect a different word may be applied to boys over and under seven years of age.

¹ Lines 8, 10, 11.

² In l. 6 the second sign of the latter formula is broken away. It can be restored with certainty from l. 5 and a series of other examples.

³ In Table (opp. p. 684), Fig. 666 A, No. B 8. In earlier examples it has 4 'posts' (see *P. of M.* i, p. 639, Fig. 474.

On the other hand, the f of the second formula can be shown to have distinct feminine associations. This character, in its completed form, as seen in Fig. 691 *a*, *b*, *c*,¹ with a horizontal stroke at the base, reproduces the characteristic elongated triangular outline of the robed 'woman' sign. It is clearly capable of use as a phonetic character, and in one case it appears reduplicated at the end of a sign-group of four letters. Elsewhere two of these characters face each other (Fig. 691 *b*). On a fragmentary tablet,² containing part of a list, f appears alone, followed by numbers, as if standing in place of the 'woman' sign, while on another it is seen substituted for it in a similar way, and followed by a single cipher, before the formulas fm and ff . The derivative type, Fig. 691, *e*, placed before the pictorial representation of a cup of the Vapheio type on the interesting tablet, Fig. 711 below,³ may possibly designate it as the property of a Minoan princess.

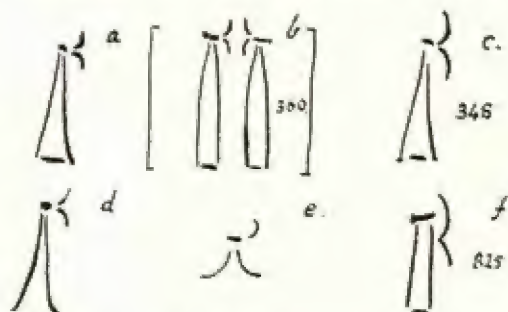


FIG. 691. SIGNS OF FEMININE IMPORT: CONNECTED WITH FEMALE CHILDREN.

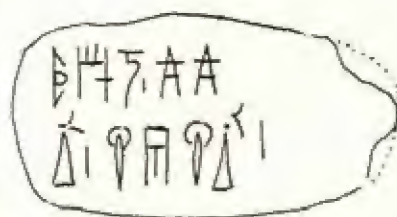


FIG. 692. EXCEPTIONALLY SMALL TABLET APPARENTLY REFERRING TO CHILDREN.

The feminine sign above and the two formulas, here recognized as representing children of both sexes are repeated on the exceptionally small tablet (Fig. 692). It almost looks as if we had here a child's tablet.

Name-groups.

A detailed examination of the sign-groups on tablets clearly 'labelled' as personal names by the 'man' or 'woman' sign that immediately succeeds them leads to a wider conclusion. The Name-Groups.

As will be seen from the Comparative Tables, Fig. 693 A and B, which are themselves by no means of an exhaustive character, the whole or part of these 'name-groups' recurs in a series of sign-groups that appear on tablets in prominent places and conspicuous characters, without being succeeded by the conventionalized figure of a man or woman.

¹ See, too, Fig. 692.

² No. 647 of my hand-list.

³ See p. 729.

With and
'man' or
'woman'
sign.

The female examples, as shown in Fig. 693 B, are not so abundant as the male, partly owing to the fact that there are longer list of persons to which the 'man' sign is actually attached, but also largely owing to another circumstance.

NAME-GROUPS FOLLOWED BY 'MAN' SIGN	GROUPS WITHOUT 'MAN' SIGN COMPARED	NAME-GROUPS FOLLOWED BY 'MAN' SIGN	GROUPS WITHOUT 'MAN' SIGN COMPARED
𐎶𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶𐎶 (1008)	𐎶𐎶𐎶	𐎶𐎶𐎶 1251
𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶	𐎶𐎶	𐎶𐎶 1131 1318
𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶𐎶𐎶𐎶𐎶	𐎶𐎶𐎶 828, 1219 1115 1485
𐎶𐎶𐎶𐎶	𐎶𐎶𐎶, 𐎶𐎶𐎶𐎶	𐎶𐎶	𐎶𐎶 842 𐎶𐎶𐎶 91
𐎶𐎶𐎶𐎶	𐎶𐎶𐎶, 𐎶𐎶𐎶𐎶	𐎶𐎶𐎶	𐎶𐎶𐎶 1448
𐎶𐎶𐎶𐎶	𐎶𐎶𐎶	𐎶𐎶𐎶𐎶	𐎶𐎶𐎶 1010
𐎶𐎶	𐎶𐎶 1289 1465	𐎶𐎶	𐎶𐎶𐎶 1224 1272

FIG. 693 A. NAME-GROUPS OF LINEAR SCRIPT B ASSOCIATED WITH 'MAN' SIGN.

NAME-GROUPS FOLLOWED BY 'WOMAN' SIGN	GROUPS WITHOUT 'WOMAN' SIGN COMPARED	NAME-GROUPS FOLLOWED BY 'WOMAN' SIGN	GROUPS WITHOUT 'WOMAN' SIGN COMPARED
𐎶𐎶𐎶	𐎶𐎶𐎶 842	𐎶𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶
𐎶𐎶𐎶𐎶	𐎶𐎶𐎶, 𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶, 𐎶𐎶𐎶𐎶
𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶	𐎶𐎶𐎶𐎶

FIG. 693 B. NAME-GROUPS OF LINEAR SCRIPT B ASSOCIATED WITH 'WOMAN' SIGN.

It will be seen that a disproportionately large number of the Knossian tablets preserved to us in whole or part, including the 'percentage' series, refers to flocks and herds, and of their nature principally relate to persons of the male sex. So, too, the 'Chariot' tablets, of which there is also a large series, may be thought to have been principally concerned with men.

The correspondence and interconnexions of these 'labelled' name-groups of both sexes, with a much larger series of sign-groups, mostly taking the initial place on the tablets, are such as to warrant the conclusion that

these, too, represent the names of individuals, personally referred to in various relations. A very considerable proportion of the sign-groups preserved in these documents may thus be treated as personal names.


The signs themselves, varying in a single group—as noted above in connexion with the 'man' sign¹—from two to five, rarely six, usually three or four in number—evidently refer rather to syllables than single letters. It is further evident that in a good many cases a single character could be used by itself on a tablet with a phonetic value representing the object that the sign in its original form was supposed to depict.





It has been demonstrated above that a series of name-groups belonging to Class B correspond in whole or part with examples taken from Class A, and the conclusion has been drawn that the language itself was practically identical and that the differences visible in B must be rather due to dynastic than to racial causes.²

From the point of view of language it is especially interesting to note that a certain number of signs included in the 'name-groups' of the B series are still sufficiently pictorial in character to declare their meaning.

Ideograms in personal names.

Specimens of tablets including such signs in name-groups are given in Fig. 694. Amongst them are several types of domestic animals, such as the ox, the goat, and the pig.

A variety of animal forms had already supplied a frequent ingredient in sign-groups of the hieroglyphic class, some referring to personal names, others probably to official titles, these, as in the later script, being represented either by the whole animal or by the head and fore-part only. There are also reproduced in Fig. 694, *e, f* two tablets on which the fore-parts of sailing vessels occupy the central position of groups,³ while in Fig. 694, *d* the *triskelis* sign appears, which may be taken to symbolize some more abstract idea—. It seems possible that several of these quasi-pictorial signs connected with animals or other objects in such name-groups had at least a bi-syllabic phonetic value.

Of the animal forms, the conventionalized horse's head ⁴ frequently recurs in name-groups, like *ἵππο-* in Greek. The 'pig's' head of Fig. 694, *a, b*, is also often found in such groups. Among the combinations of signs in which it occurs are  (Fig. 694 *b*),⁵ and .⁶ The

Domestic animals thus included: swine.

¹ See above, p. 706.

² See above, p. 684, Fig. 665.

³ See especially, *Scripta Minoa*, i, p. 263 seqq. and Table XIV, pp. 232, 233, A. 58-84.

⁴ See below, p. 800, for comparative

examples of the sign.

⁵ Distinguished from the initial group by smaller characters.

⁶ No. 972 of my hand-list.

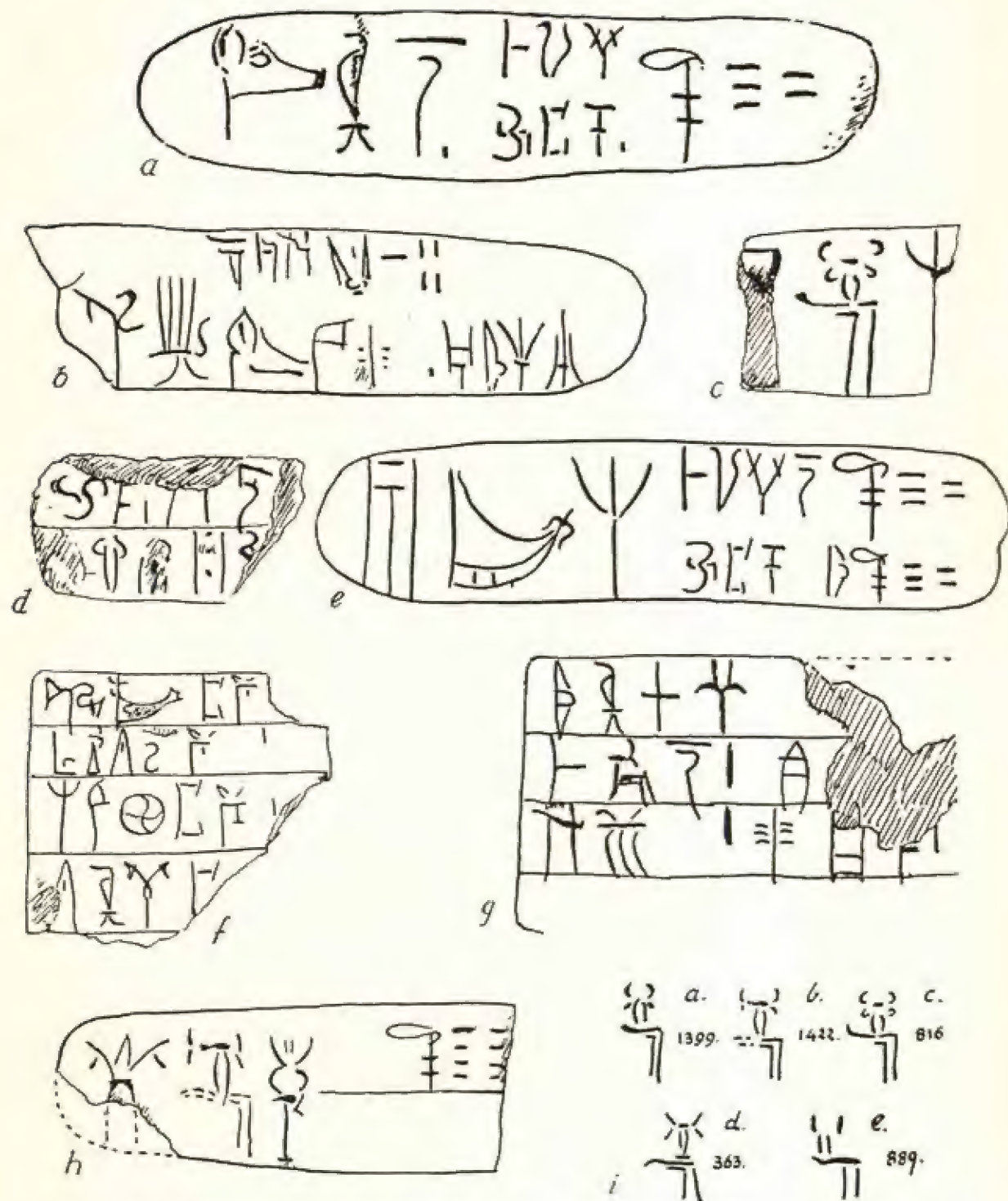







FIG. 694 a-i. SPECIMENS OF TABLETS SHOWING NAME-GROUPS CONTAINING QUASI-PICTORIAL SIGNS OF ANIMALS AND OTHER OBJECTS. i, VARIETIES OF 'OX' SIGN.


swine is widely used as a component of personal names, and Scandinavian forms like *Svinhufud* (swine head) will at once occur. A late Greek name form, *Χοιροβοσκός*, 'swineherd', may also be cited.

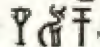


The 'goat', of the group , recalls the frequent appearances of the animal's head in the hieroglyphic series.¹ The 'goat's' head sign is itself well known among the Hittite hieroglyphs, where it has a special importance from its appearances with a cuneiform key to its phonetic value on the silver boss of Tarkondemos.² The name, written thus as the Greek transliteration of the names of Cilician kings, reads there Tarkutimme, the first element, Tarku- (or Tarrik-), being represented by the goat's head. Considering the exceptionally close relation in which the older ethnic element of Crete seems to have stood to the primitive population of Cilicia and its borderlands,³ we have good warrant for concluding that the 'goat' sign on the Knossian tablet represents a familiar phonetic element in a Minoan name. It may indeed well be asked if the Greek word *τράγος* for a he-goat, which does not seem to be of 'Aryan' origin, may not be included among names taken over from the older occupants of Hellas.




Hittite parallel to 'Goat' sign.

Unfortunately, we have no such obvious clue in the case of the 'ox' sign which also recurs in these name-groups.⁴ Four examples of sign-groups depicting the fore-part of this animal, are shown on fragmentary tablets, , ,  and , followed by the saffron sign. (Fig. 694, *i*, and cf. *c* and *h*.)

'Ox' in names.

The female association of the sign is here indicated by the recurring .

A bird, possibly intended for a goose, occurs in the name-group , and the 'flying bird' sign, presumably an eagle, is of not infrequent appearance in groups connected with the 'man' sign (, ) and also in a female association.

Recognizable signs such as the 'lily', , and the 'leaf', , also occur both in male and female name-groups. It is interesting to find in the same relation the conventional 'eye' sign—which itself displays a striking resemblance to the Tyrian form of the Semitic 'ayin—.




¹ *Scripta Minoa*, p. 207, No. 64.

² See especially *P. of M.*, i, p. 6 seqq.

³ See Sayce's epoch making interpretation of the Hittite signs on the boss, *Trans. Soc. Bib. Arch.*, vii, Pt. II (1881), p. 297, and cf. his restatement in W. Wright, *Empire of the Hittites*, 1886.

⁴ According to the late Dr. A. E. Cowley (*The Hittites*, Schweich Lectures, III, pp. 57, 58), the bull or ox head occurs as the first sign of the place-name Mar'ash (in cuneiform Mar'āšu) and would therefore represent M.

'Ship'
and 'rud-
der' in
name
forms.

The appearance of the ship¹—represented by its forepart—as an element in the formation of personal names, seen in the groups  and  above, is of interest from the comparisons that it suggests with Greek nomenclature. In the parallels that occur, such as *Ναύστρατος*, *Ναυσικλῆς*, *Ναυσικάα*, and the like, it is to be noted that, in contrast to the Minoan compounds, the syllable relating to the ship occupies the initial place. In this connexion the appearance of the 'rudder' sign, as an element in a name-group has also a considerable interest (Fig. 695, *a*). In a secondary shape , on a vase fragment of L. M. III *a* date from Knossos,² it is again found, apparently in a name-group (Fig. 695, *b*). Such nautical combinations mark the personal names of a maritime race.

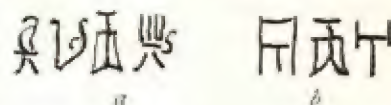
















FIG. 695. 'RUDDER' SIGN IN GROUPS (*b* L. M. III).

Terminal Signs of Name-groups: Male and Female.

Terminal
signs of
names:
male and
female.

An examination of the names followed respectively by the male and female figures shows that in each case there is a preponderance of particular terminal signs.

Thus among 100 groups before the 'man' sign,  occurs 20 times,  14,  11,  10,  6,  5,  4,  4,  4, while a variety of other terminal signs are found once or twice.

Among 55 groups followed by the 'woman' sign,  recurs 16 times, representing nearly a third of the whole,  is found 5 times,  and  4,  3, and 15 other signs once or twice.

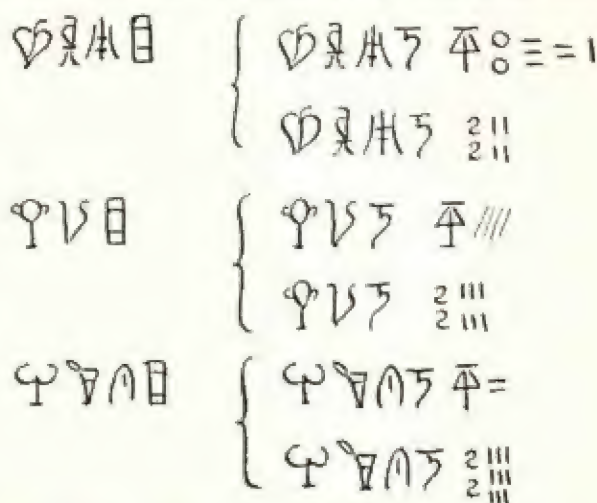





FIG. 696. EVIDENCE OF DECLENSION IN FEMALE NAME-GROUPS ENDING IN .

¹ For this 'ship' sign compared with its equivalent of Class A, see *P. of M.*, ii, Pt. I, p. 238.





² See below, p. 738, Fig. 722.

The great preponderance of the 'door' or 'gate' sign  in this case amounting to over 30 per cent., is a noteworthy feature. This sign is hardly ever seen in connexion with the 'man' sign and must be as a rule regarded as an indication of the female sex. Where it occurs at the end of a name-group without indication of sex the presumption is that we have to do with a woman's name.

It is, further, of considerable interest to find that, in repeated instances, groups ending in  and otherwise followed by the 'woman' sign, undergo the same change in their terminal character before signs connected with numbers (Fig. 696). We have here, surely, good evidences of declension.

Evidence of declension.

Y and 'Cup' Sign of Name-groups of Class A found at Melos.

Of special importance is a collocation of signs—the Y and handled cup  (see Figs. 696 and 721, p. 736, below). This forms an initial element in both male and female names, and recurs with characteristic male suffix, , preceded by , which seems to be a preponderantly masculine termination, and with the characteristic female suffix  coupled in the same way (see Fig. 696). That it belongs to a common personal name, applied with a different suffix to both men and women, is a fair conclusion, and it is therefore of quite excep-

Name-group common to Melos.

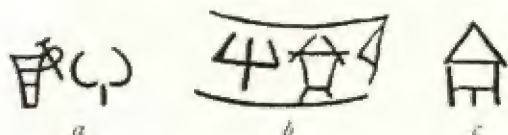


FIG. 697. *a*, GRAFFITO ON BASE OF VESSEL, MELOS; *b*, THERA POT; *c*, EARLY BARN SIGN, KNÖSSOS.

tional interest to find it again—apparently as a personal mark of proprietorship—on the base of a black-ware vessel from Melos (Fig. 697, *a*). The sherd itself is of comparatively early date, and this, as well as the form of the 'vase' sign and

the archaic retrograde direction of the inscription, assigns it to an early phase of the Linear Class A. It shows that Cretan colonists in the Cyclades had imported, with other evidences of their culture, the use of their language, and fits in with the graffito characters on the rim of a pot from Thera (Santorin) (Fig. 697, *b*)¹—the first of which is also peculiar to Class A. The 'barn' sign that there succeeds it is common in variant forms to both the linear scripts, but the 'piles' here visible below it bring it into closer connexion with the earlier form of the character as it appears in the

Class A inscription from Thera.

¹ See *P. of M.*, i, p. 637, n. 2.

hieroglyphic series (Fig. 697, *c*).¹ It might be equally well regarded as some kind of rick on a platform.

Hieroglyphic inscriptions in same language.

The ultimate dependence of both the Minoan linear classes on the hieroglyphic and still more primitive pictographic systems that had preceded them in Crete has already received sufficient demonstration.² The interconnexion, indeed, is of such a kind as to impose the conclusion that we have to do with an earlier form of the same language. Not to speak of the Cypriote and East Mediterranean offshoot, the Cretan dominion on the soil of Mainland Greece naturally brought in its wake the same diffusion of the Minoan script and language of which these still earlier records are traceable in the Cycladic Isles. In the succeeding Section cogent proofs are supplied of the survival of the later script and language, and, with it, the nomenclature of Minoan Crete in the chief Mainland centres to a date appreciably later than the fall of the Great Palace.

Olive Culture and Signs relating to it.

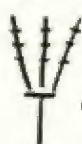
Olive culture and symbol of its superintendence.

It is interesting to find that the symbol of superintendence referred to

above in the case of the 'man' and 'woman' sign is combined in the shape shown in Fig. 699, with a character, No. 45 of the B signary (Fig. 698), which, in its more pictorial aspects, may be identified with the olive-tree. In this ideogram, represent-

B 77

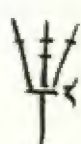
a



418
cf. 331
962



343



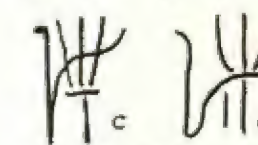
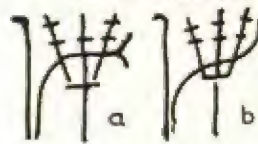
1165



617

FIG. 698. NO. 45 OF SIGNARY B, IDENTIFIED WITH OLIVE-TREE: *b* IS CONNECTED WITH THE 'SUPERINTENDENCE' SIGN AS SHOWN IN FIG. 699, *a*.

B 77 SUPERINTENDENCE
b OF OLIVE GROVES



IN GROUP FOLLOWED
BY

FIG. 699. SYMBOL OF SUPERINTENDENCE COMBINED WITH OLIVE-TREE SIGN.

ing the superintendence of the royal olive groves, we have signal evidence of the importance of the oil-production in the last Age of the Palace.

The best rendering of the tree itself is found in an inscription on a

¹ *Scripta Minoa*, i, p. 196. No. 42, *a*, *b*. 477) of signs of the linear and hieroglyphic 'scripts' is capable of considerable additions.

² The Comparative Table (*ib.*, p. 643, Fig.

remarkable tablet—dealing besides, apparently, with three or more other

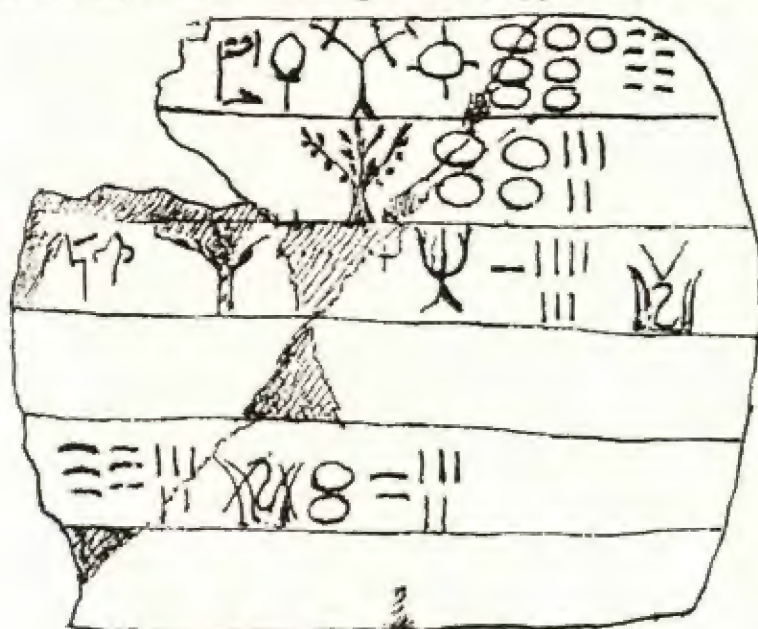


FIG. 700. TABLET REFERRING TO TREES: OLIVE-TREE IN SECOND REGISTER.

trees—of which about half seems to have been preserved (Fig. 700). The conventional figure in the first line may represent some forest tree, since it is followed by numbers amounting to 1,780. Some specific clue to the olive-tree in line 2 is supplied by the indication of berries as well as leaves. The

Olive sprays and ship: indications of oil export.

character of the foliage, in fact, corresponds with the group of signs



FIG. 701. SPRAY INDICATIVE OF OLIVE-TREES: 'HIEROGLYPHIC' CLASS.

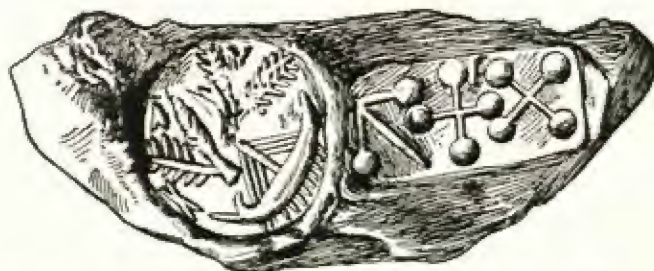


FIG. 702. SEAL IMPRESSION OF 'HIEROGLYPHIC' CLASS, KNOSSOS, SHOWING OLIVE-TREE SIGNS ABOVE SHIP.

recognized as 'olive sprays' that recur on seal stones and clay documents belonging to the hieroglyphic class (Fig. 701).¹ These, as shown on a clay seal impression (Fig. 702),² appear above a ship, a probable allusion to

¹ *Scripta Minoa*, i, p. 209, No. 101, and cf. No. 102.

² *Ib.*, p. 161, P. 63, and cf. *P. of M.*, i, p. 281, Fig. 213.

the export of oil from Minoan Crete to Egypt. The item on the present tablet deals with 405 olive-trees, a fairly large plantation.

Saffron Culture.

Signs relating to Saffron Culture.

It is clear that, throughout the whole of the Palace period,¹ one of the sources of wealth to the lords of Knossos was to be found in the culture of saffron. Its best record has been supplied by the fresco of the Saffron Gatherer,² in style the earliest of the series, and above attributed to the later phase of M.M. II. A child is there seen collecting the flowers in baskets. The flowers, in clumps or rows, recur on the votive robes of faience from the Temple Repositories.³ The saffron is found, too, both as a phonetic sign in a name-group and before numbers, up to 60, on tablets of the A class from Hagia Triada, while its religious connexions seem to be marked by its appearance on the Trullos stone ladle⁴ at the end of a sign-group.

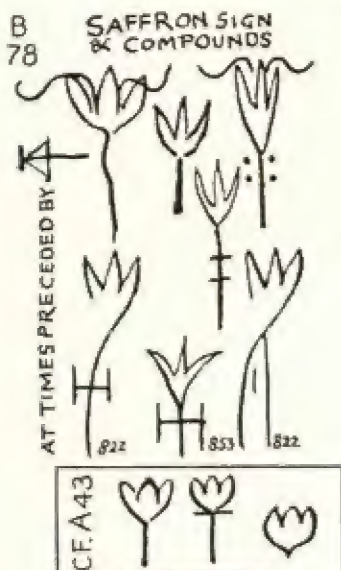


FIG. 703. 'SAFFRON' SIGN AND COMPOUNDS.

at Mycenae, Leda bore to her daughter Helen a saffron-bordered veil for her fugitive marriage—to be recovered later from the flames of Ilion?

Comparative examples of the 'saffron' sign are given in Fig. 703. In

¹ For the earlier period compare the seal-stones and impressions of the hieroglyphic series showing saffron flowers. *Scripta Minoa*, i, p. 213, No. 88.

² *P. of M.*, i, pp. 265, 266 and Coloured Plate IV. On the saffron in Minoan Art see now especially Prof. Martin Mobius' excellent article, *Pflanzenbilder der minoischen Kunst in botanischer Betrachtung* (*Jahrb. d. d. Arch. Inst.*, 1933), pp. 7-9 and Fig. 4. The plant itself, *Crocus sativus*, does not seem to be known

in a wild state. Dr. Mobius, however, suggests that the ancestral stock is to be found in *Crocus Cartwrightianus*, which is indigenous in Crete.

³ *Ibid.*, p. 506, Fig. 364.

⁴ *Ibid.*, pp. 625, 626 and Fig. 463, l. 2, No. 21.

⁵ *Ibid.*, iii, p. 71 seqq., and Coloured Plate XVIII ('The Sacred Grove and Dance').

⁶ Virgil, *Aen.*, i, 648 seqq.

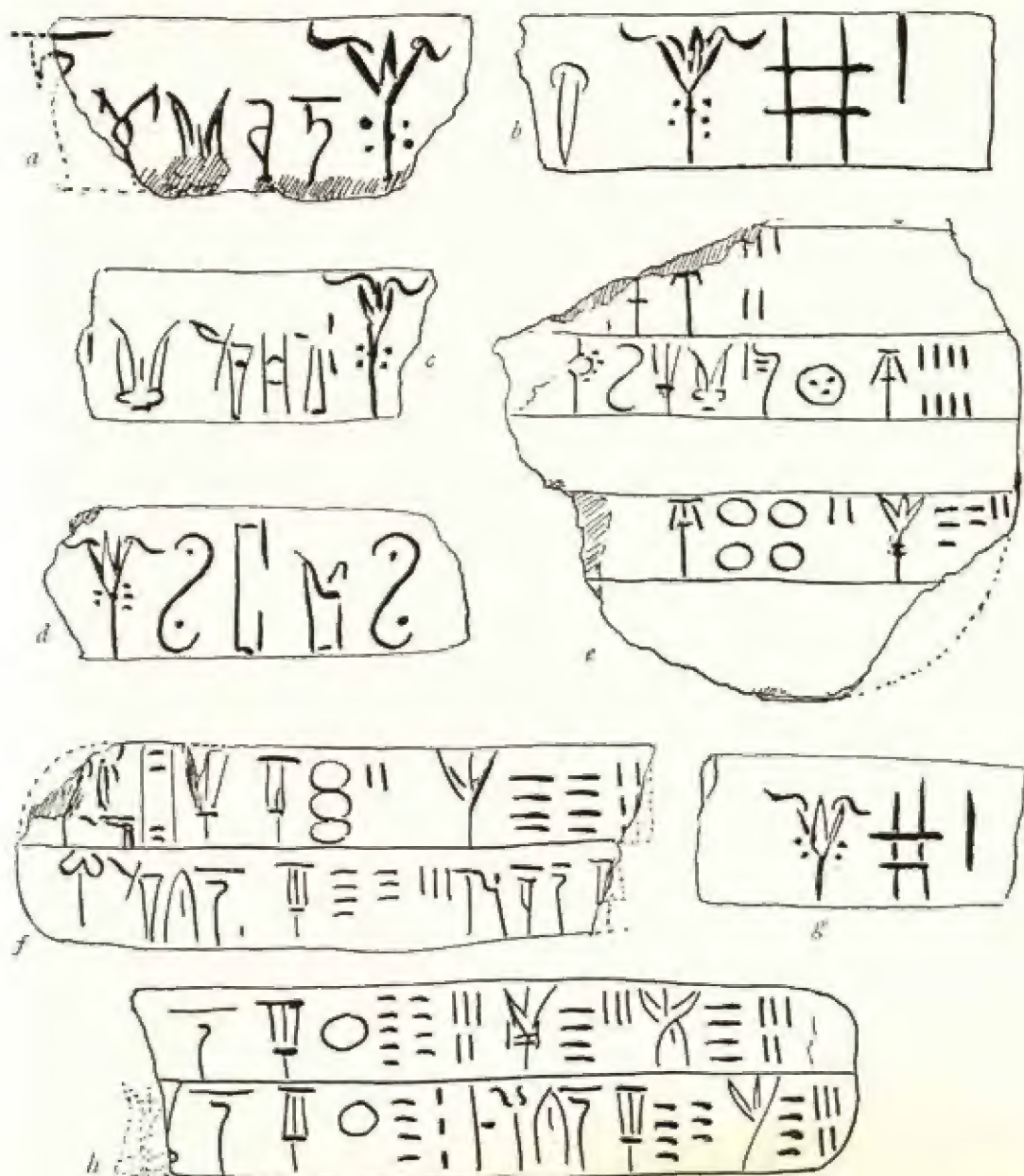




FIG. 704. TABLETS SHOWING SAFFRON FLOWER SIGN.


the tablets of Class B presenting this sign, shown in Fig. 704, three interesting points may be observed.

In repeated cases (e.g. Fig. 704, *e*) it is coupled with 𐎶 , the feminine signification of which—often attached to what seems to be the 'child' sign—

is demonstrated above.¹ So, too, in *f* we see it following , the terminal of female names, while, on the same tablet and in *h*, sign-groups appear ending in  a feminine termination.² In *d* it is associated with the 'throne and sceptre', and in both *b* and *g* it is followed by a sign clearly representing an enclosed plot—the 'acre' sign of Fig. 705 below, and no doubt answering to a definite area. The 'saffron' sign itself in these cases presents an unmistakable characteristic in its protruding and pendulous stigmas, from which, with part of the stile, the precious dye was produced.

* Plot' or
'garden'
sign.

The 'plot' or 'garden area' here referred to is only accompanied by a single cipher. The flower itself, as seen on Fig. 704, *e*, is in one case succeeded by numerals = 52. On *h*, the 'saffron' sign is followed by numbers = 43, 45, 45, thus totalling 133. On the incomplete tablet, Fig. 704, *f*, we see numbers, apparently amounting to 86, appended to it. These higher sums connected with the plant evidently refer to some recognized measure of its commercial product.

It is noteworthy that in several cases the saffron stands in immediate relation to a sign which in its more regular form  must be identified with a symbol—described above as the 'impaled triangle' of frequent occurrence in the field of Late Minoan seal-types and clearly of religious import. Here, as in other places where this sign appears, it is generally followed by relatively high numbers. On Fig. 704, *e*, we see 402, on *f* where this sign immediately succeeds the 'saffron', 302. It may be thought to represent some sanctuary interest in the transactions.

Saffron
culture in
Anatolian
'home
land';
Korykian
Cave.

That saffron culture should have played a prominent part in the industry of Minoan Knossos³ is singularly appropriate to the special ethnic and geographical relation in which it had stood to the Cilician Coast-land. Crocus culture was indeed specially connected with the sacred precincts of the Korykian Cave.⁴ It has been suggested with some probability that the name *κρόκος* itself, which, as the old Hebrew form *karkôm* shows, was of Eastern derivation, was derived from some intermediate Anatolian form that gave its name to Korykos and its Cave.⁵ In that case the intermediary source may well be sought in the language of Minoan Crete. The Korykian Cave itself stands in the centre of a

¹ See pp. 708, 709.

² See above, p. 714 and Fig. 696.

³ For the Saffron in Minoan Art, see now, especially, Prof. M. Mobius' *Pflanzenbilder der minoischen Kunst*, &c. (*Jahrb. d. d. Arch. Inst.*, 1933), p. 7 seqq.

⁴ Strabo, l. xiv, C. 5, 5; ἐν ᾧ ἡ ἀρίστη κρόκος φέεται . . . παρέσπαρται δὲ καὶ τὰ ἐδάφη τὰ φέροντα τὴν κρόκον. Cf. Dioscorides i. 25.

⁵ V. Hehn, *Kulturpflanzen* &c. (1874 ed. p. 224).

region the later inscriptions of which have still preserved the patronymic of Knossos.¹

That Crete itself was well suited to the growth of the saffron plant—*Crocus sativus*—is shown by the revival of its culture there during the period of Venetian occupation. Several localities, especially in Western Crete—like Saffron Walden with us—bear names derived from the Italian form of the word.

Cereal Group of Signs.

A series of signs connected with cereals or other vegetable crops are put together in Fig. 705 and some account of the pictographic and other

Group of 'Cereal' Signs.

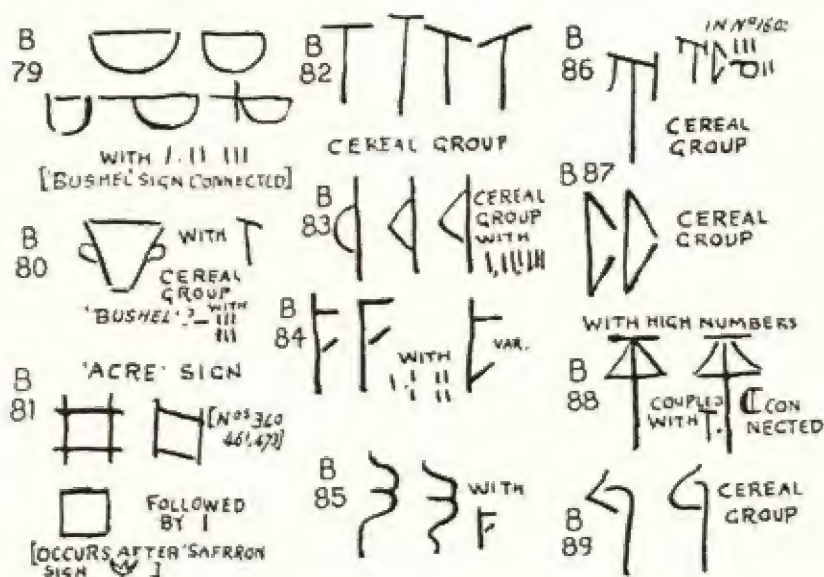


FIG. 705. IDEOGRAPHIC SIGNS CONNECTED WITH AGRICULTURE AND CEREALS.

records of various kinds of grain has been given above.² It is highly probable that Nos. 79 and 80 may represent actual measures for such, just as in 81 we see a plot of land, presumably of standard size such as an 'acre' or 'hectare', specially coupled with the 'saffron' sign.

The 'Cereal Group' of Signary B has already received some attention,

¹ Cf. *P. of M.*, i, p. 6 and n. 2. The personal name Κνωσ is thrice connected with the Korykian Cave and the Temple of the priestly dynasts of Olbê. Cf. E. L. Hicks, *Inscriptions of Asia Minor*, *J. H. S.*, xii, p. 230 seqq. As

Sir William Ramsay has pointed out, *Ib.*, xxxii (1912, p. 170), there seems to have been a Knossos in Pisidia.

² P. 622 seqq.

Cereal
Group of
Signs.

and clay documents illustrating various kinds of grain have already received illustration.¹ These plant forms are of their nature conventionalized pictographs, and some attempt has been made to distinguish the various kinds of produce, including barley, oats, and rye. In connexion with these cereal forms it has also been shown that special signs of measure and quantity were in vogue, which are here put together in B. 79, 80 of Fig. 705. These may be regarded as special measures either of the grain itself or of some liquid produce—such as kinds of beer. There is some evidence, indeed, that the bowl, No. 79—sometimes handled—was for liquid contents and might be regarded as the equivalent of a 'pint' or 'quart', while No. 80 may stand for a 'bushel'.

Flocks and Herds: Swine and Horses.

Flocks
and
Herds.

The group of ideographic signs shown in Fig. 706 are clearly inter-related and can only be regarded as referring to cattle, including horned

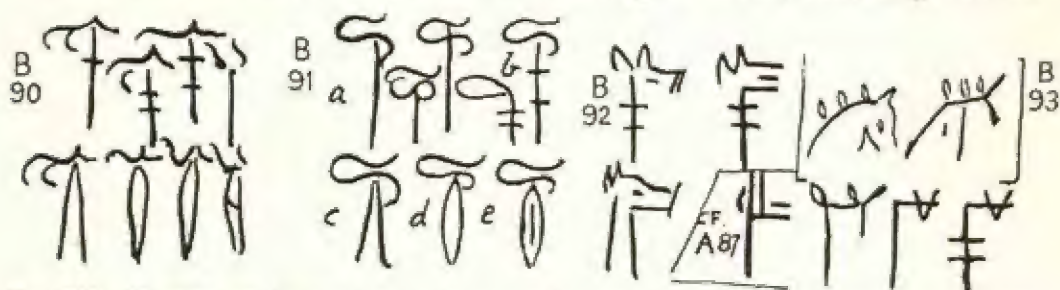


FIG. 706. FLOCKS AND HERDS: B 90, HORNED CATTLE; B 91, HORNED SHEEP (OR GOATS); B 92, SWINE; B 93, HORSES.



sheep, goats, swine (Nos. 90-92), and horses (No. 93). All four are grouped together in a series of exceptionally long tablets of which complete specimens are given in Fig. 707 *a, b, c* reduced to about three-quarters.

Swine.

In these the swine's head signs of the second register are unmistakable. So, too, figures that follow these are shown by the transitional forms, given in Fig. 706 under B 93, to be horses' heads.

The transformation of the tufts of hair artificially arranged along the back of the horses' necks, as illustrated by the 'Chariot Tablets' described in Section 114, into a mere loop and crest and of the head and neck itself into a rectangular appendage, may serve as a good illustration of the compendious methods resorted to by the Minoan sign maker.

See above, p. 622 seqq.

That B 90 and B 91 are horned cattle may be fairly concluded. In the first case we seem to have to do with ox-horns curving downwards, conventionally set—as B 92, 93—on an upright stem,  B 91 on the other hand, as seen for instance in *a*, almost exactly reproduces the effect of the horn of the native variety of sheep—copied literally in the inset from a seal-type—set up in a similar manner . But it is not necessary to confine this symbol to sheep. It may very well include domesticated goats, both classes of animal being traditionally grouped together under the single name of *πρόβατα* still current in the Island.

Horned
cattle
sign.

Horned
sheep
or 'flock'
sign.

While, then, in two cases we recognize the heads of the swine and horses, taken as the equivalents of the whole animal and set up on linear supports, the other examples give the horns alone made use of for purposes of recognition in a similar way. It will be seen, moreover, that in each category, as shown on the tablets Fig. 707 *a-c*, there are two distinct types of linear supports to these horn symbols—a plain upright crossed by two bars, and what may be called two legs, converging on a point above, on which the horns are set.

As to the meaning of these dual delineations there can be little doubt. It is a fair conclusion that they were devised to distinguish the two sexes. The barred single upright may be of arbitrary contrivance, but the elongated acute angle is associated with two varieties of ideographic signs (see above pp. 708, 709) relating in one case to women (where it is a secondary form), while in the other, as shown above—coupled with a general sign for children—it marks the female sex and may sometimes, indeed, be used to mean 'mother'.

Indica-
tions of
sex.

The number of animals in the respective classes fully bears out these conclusions as to the identity of each. It is natural to find the oxen less numerous than the sheep and goats. Thus, on the examples given, their numbers are 345, 170, and 159 (?), while the 'flock' signs are followed respectively by 900, 750, and 301. It is further to be observed that, while apparently on no document do the single items attached to the sign for horned cattle reach 350, the numbers following the 'flock' sign are often much greater than those given on the above examples and in one case exceed 19,000. The 'percentage tablets' described below belong to this category.

The 'flock' and 'herd' signs of the usual kinds, as shown on the tablets grouped in Fig. 707, are of a purely ideographic class and are only

found in relation to numbers. Two closely allied signs, however, occur, evidently referring respectively to the same animals, in which the double stem is replaced by an elongated upright loop (Fig. 706, B 90, 91 *a, d, e*),

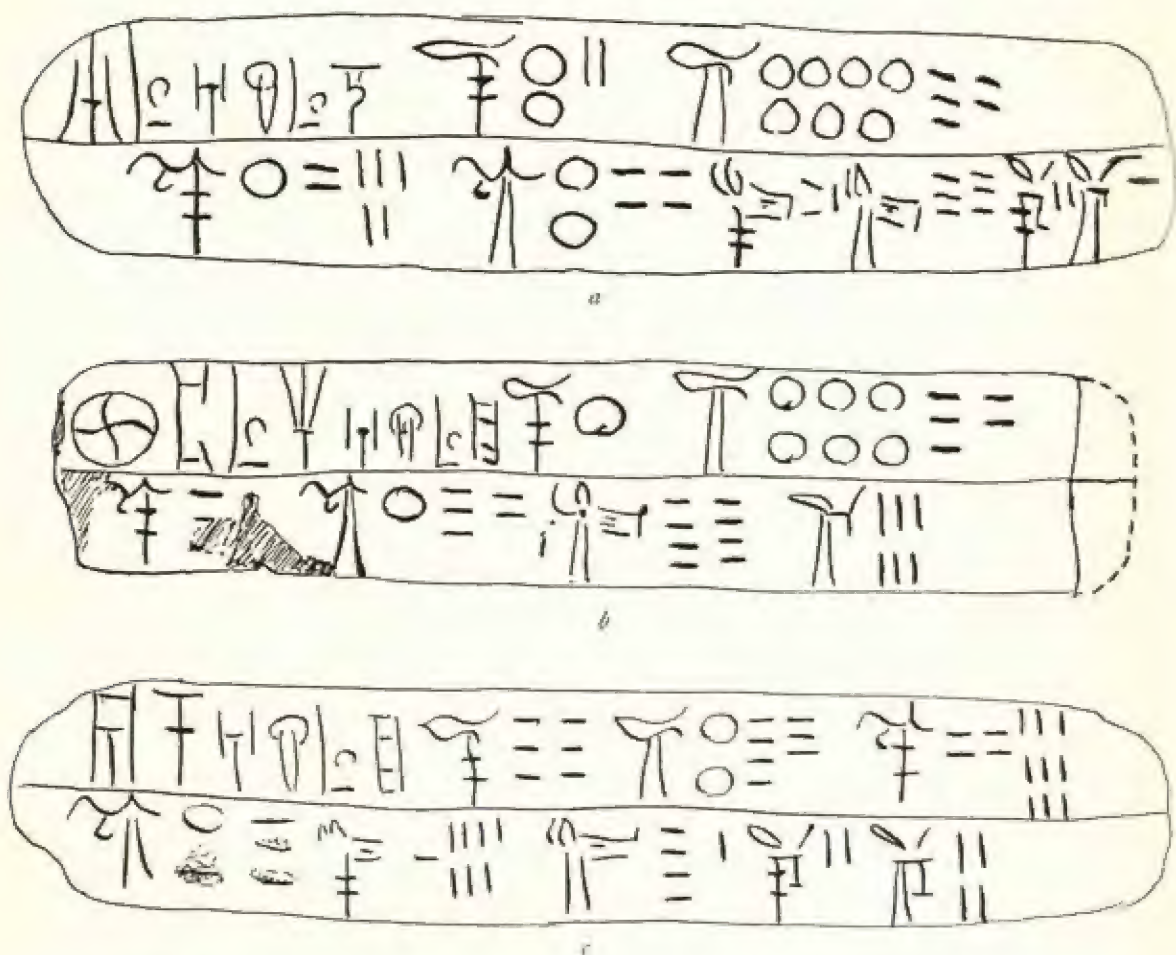


FIG. 707 *a, b, c*. TABLETS RELATING TO FLOCKS AND HERDS, SWINE AND HORSES.

and these seem to be essentially of the phonetic class. They are only found in sign-groups that presumably represent personal names. These signs are never directly connected with numbers.

As is natural, the numbers of swine mentioned in single tablets are less than those of the sheep and goats, amounting at most 186. Here, too, the pig's head by itself, sometimes with a short un-barred stem, is used phonetically in name-groups. The same is true of the 'horse' sign.

Signs specially attached to Numbers or Quantities.

A series of characters is specially prefixed to numbers. (See Fig. 708.)

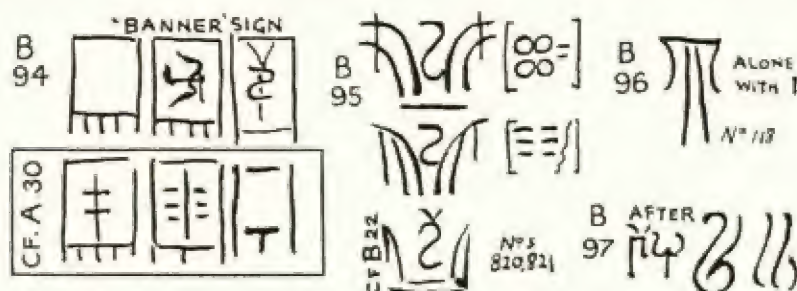









FIG. 708. SIGNARY OF LINEAR CLASS B. 'BANNER' AND OTHER SIGNS USED BEFORE NUMBERS.

Some such signs, like , referred to above,¹ are almost indifferently used both in this position and as a regular phonogram in word-groups. The 'impaled' triangle  and  (cf. B 88 : Fig. 705) also recurs as a religious symbol,² and the sign B 95 given in Fig. 708 compounded of the  (B 60) and the 'horns of Consecration' (B 22) also belongs to this class.

Signs specially connected with numbers or quantities.

The sign, B 94,  (Fig. 708), conveniently described as the 'banner' is not only used by itself before numbers³ but in the same position forms a vehicle for the insertion of a series of other signs of ordinary phonographic use such as  and . It also, as already shown,⁴ frames a conventionalized 'ingot'.

Pictorial Figures of Uncertain Meaning.

In addition to the ordinary characters, capable of being used as phonograms in word-groups, and the special signs governing numbers, a large number of documents are provided with pictorial figures relating to the subjects of the documents—a most useful guide to their meaning (see Fig. 709).

Pictorial figures of uncertain meaning.

'Ingots' on a group of tablets of this nature have been already described, and vessels of various shapes and materials are seen on another series illustrated below. To this class, too, belong the arms and armour, chariots and horses referred for description to the succeeding Section. In

¹ See above, p. 663

² See above, p. 693, Fig. 679.

³ See above, p. 570, Fig. 544 c, &c.

⁴ See above, p. 663 and Fig. 651.

other cases, however, it is not so easy to pass a definite judgement as to the meaning of these quasi-pictorial figures.

Specimens of such are shown on the fragmentary tablets reproduced

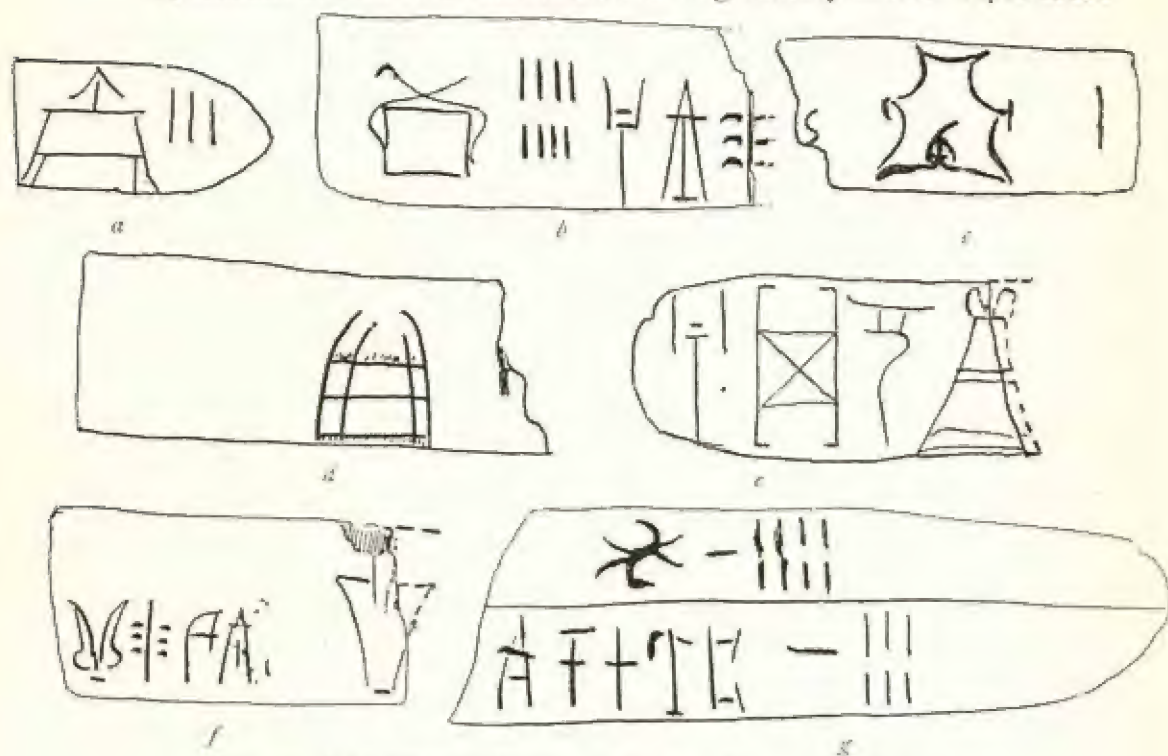


FIG. 709. TABLETS WITH PICTORIAL SIGNS OF UNCERTAIN MEANING.

in Fig. 709. Of these the last (*g*)—before numbers amounting to 18—somewhat resembles a lizard. That of *e* differs from the others inasmuch as it appears in the middle of a word-group, 𐎶𐎵𐎶 —*ex hypothesi* a personal name. This itself stands before a pictograph of a cuirass, forming part of a knight's equipment usual on the 'Chariot tablets' described below.¹ The object looks like some kind of frame or *chassis*.

It is possible to interpret the figure on *a* as a simple form of tent—*tente d'abri*—with an arrow above, suggestive of military use. Fig. 709, *b*, may well be some kind of coffer, with cords attached to secure its lid; *c* with the script sign 𐎶 superposed on it, and *d* (which looks like a form of coop left open at top) are hard to determine. The incomplete object on *f*, however, is apparently a spade.

¹ See below, p. 803 seqq.

Pictorial Figures showing Forms of Vessels; Deposit of 'Vase Tablets'.

The important finds of vessels of various shapes and materials in the Palace itself or in its immediate surroundings have already given occasion to refer to tablets of the B class presenting similar objects. The conformity of some of these vases and of others held by the 'Cup-bearer' and his fellows on the Palace frescoes¹ with those borne by the Minoan chieftains as tributary gifts of the Viziers of Hatshepsut and Thothmes III—including the Vapheio form—has also received attention.² Among the actual remains of such vessels the splendid hoard of bronze basins and the associated ewer found in the North-West Treasure-House,³ from the artistic point of view rank very high. As a more or less contemporary supplement to it may be grouped the varied deposit of bronze vases and utensils from the 'Tomb of the Tripod Hearth',⁴ and the hoard of silver vessels from the 'South House'.⁵ For the clay equivalents of the large bronze ewers we have, besides, the fine array of painted 'hydrias' and 'amphoras' in the 'Palace style' from the Sanctuary halls on the Western confines of the building.⁶

Deposit of Vase Tablets: documents showing forms of vessels.

Comparisons with hoards of metal vessels.

Considerable remains of stone vases also occurred, of varied materials. These include two unfinished 'amphoras' of native alabaster from the 'Sculptor's Workshop' described below,⁷ the *alabastra* from the 'Room of the Throne', a cup of Vapheio type, in a beautifully veined stone,⁸ that artistic *tour de force* the bull's head 'rhyton' of inlaid black steatite⁹ with crystal eyes, and those of marble-like stone in the form of a lioness's head from the Treasury of the Central Palace Sanctuary in the Western Wing.¹⁰ The latter, as we have seen, are of singular interest from the recurrence of this sacred utensil of the lion-guarded Knossian Goddess—identical in workmanship and material—beneath the inmost shrine of what was later the Delphic Sanctuary of 'Apollo of the Dolphin'.¹¹

The deposit in which were found the lioness 'rhytons', together with

¹ *P. of M.*, ii, Pt. II, p. 719 seqq. and Figs. 450-52. See, too, p. 534 seqq. and Figs. 337-40.

² Cf. *Ib.*, ii, Pt. II, p. 736 seqq. See, too, the tributary vessels from the Tomb of Menkheper-ra-senb (*Ib.*, p. 746, Fig. 482).

³ *Ib.*, ii, Pt. II, p. 637 seqq.

⁴ *Ib.*, p. 635 seqq. and Fig. 398. Cf. A. E., *Prehistoric Tombs of Knossos*, i, p. 33 seqq.

⁵ *Ib.*, ii, Pt. I, p. 387 and Fig. 221.

⁶ See above, p. 299 seqq.

⁷ See below, p. 896 seqq., and Figs. 875 *a, b*.

⁸ *Ib.*, ii, Pt. I, p. 380 and Fig. 212.

⁹ *Ib.*, Pt. II, p. 527 seqq. and Figs. 330, 331 from the 'Little Palace'.

¹⁰ *Ib.*, ii, Pt. II, p. 827 seqq. and Figs. 542, 543.

¹¹ *Ib.*, p. 832 seqq. and Fig. 519.

Relation
of Vase
Tablets
to Central

the remains of a whole series of ritual vessels¹—including one of native faience—belonged to a small square 'Treasure Chamber', opening out of the South-East corner of the Central Tri-Columnar Hall of the West Wing

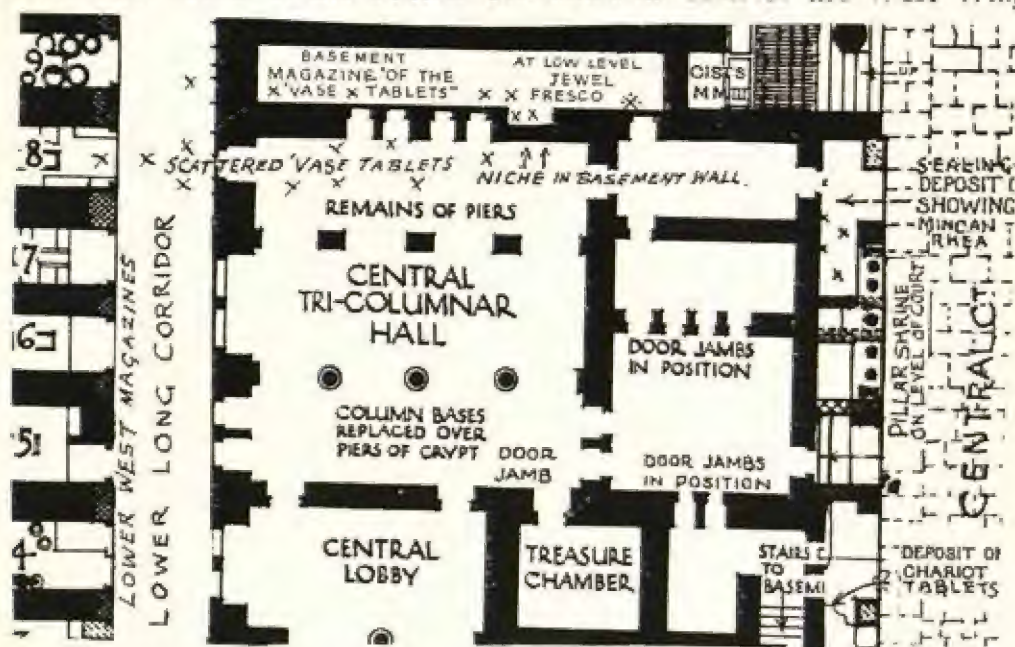


FIG. 710. PLAN OF CENTRAL SECTION OF WEST WING OF THE PALACE SHOWING DISTRIBUTION OF THE 'VASE TABLETS' (x x x).

Palace
Sanctuary.

(see Plan, Fig. 710). This formed part of a complex bordering the Late Pillar Shrine on the Central Court, where the seal impressions were found presenting the lion-guarded Goddess on her peak.² It served, in fact, as the 'congregational' section of a sanctuary of the Minoan Rhea, which, as the remarkable piece of evidence cited above shows, may be regarded as the metropolitan sanctuary of a pre-Hellenic shrine at Delphi.

The principal hoard of tablets referring to vessels of various kinds stands in connexion with what seems to have been some repository of archives situated on the North borders of this Sanctuary Hall. This, it is clear, contained documents referring not only to vessels of bronze or precious metals, but to abundant stores of clay vessels, possibly with liquid contents. What may be called the core of the deposit was, itself, found, about a metre below the upper floor-level, in a small niche or *loculus* in the upper part of a basement wall on that side³ and which had served to collect part of the

¹ *Ib.*, p. 820 seqq. and Figs. 537-40.

² See above, p. 602 and p. 608, Fig. 597 A, c (cf. *P. of M.*, il. p. 809).

³ See A. E., *Knossos Report*, 1900 (*B. S. A.*, vi), p. 50. It was not at that time possible to point out the evident relation of the hoard

remains when precipitated from a part of the neighbouring upper floor (see Plan, Fig. 710). The further remains of the hoard had unfortunately been a good deal scattered, chiefly in a Westerly direction,¹ fragments belonging to it occurring as far on that side as the upper part of the lower Long Corridor, by the entrance to the VIIIth Magazine. From the abundance of decayed gypsum precipitated with the tablets into the recess in the basement wall, it looks as if, as in some other cases, the tablets had been stored in chests of this material.

Among the scattered tablets of this group, that reproduced in Fig. 711² claims the first place. In its exceptionally hard-baked texture this example fits on to the fabric of the clay documents of the Linear Class A, following the practice of the earlier Hieroglyphic series. On the other hand, the signs themselves are typically representative of Class B. That it goes back to the earlier stage of the last Palace period, within the limits of which the B deposits lie, may be fairly concluded, and, as shown above, the earlier part of this phase synchronizes ceramically at Knossos with L. M. Ib. The Vapheio shape of cup here illustrated, though of earlier tradition in Crete, seems to have been rather specially in vogue at that time, and to it, indeed, the gold originals found in the tomb itself belong.³ The annexed ciphers show that the document itself refers to a set of three. We

have seen that the Λ , of which a minute variety appears beside it, is otherwise found in a feminine relation. Were these cups for a Queen's table?

with the Tricolumnar Hall of the Central Sanctuary. The basement space in the upper level, in which the bulk of this scattered deposit came to light, was called at the time the 'Magazine of the Vase Tablets', though it was later recognized that they had all made their way there from an upper floor. This space was originally covered above by the passage-way leading from the Stepped Portico to the Upper Long Corridor.

¹ A few, however, had made their way SE. to the borders of the area where the 'Chariot

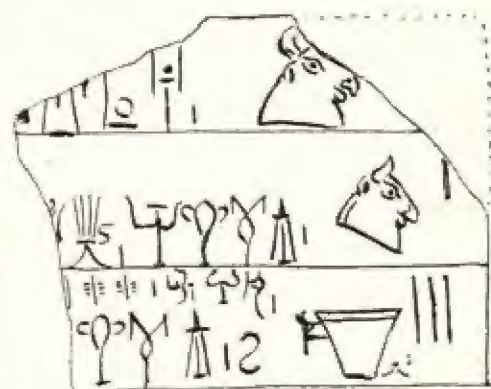


FIG. 711. TABLET OF FINE EARLY FABRIC OF CLASS B, ILLUSTRATING BULL'S-HEAD RHYTONS AND VAPHEIO CUP.

tablets' were found.

² See, too, *P. of M.*, ii, Pt. II, p. 533, where its exceptional character was pointed out.

³ So, too, we see large vessels of this class of gold and inlaid silver carried by the tribute bearers from Keftiu on the walls of the Tomb of Sennut, of more or less contemporary date (last decades of Sixteenth century B.C.). See *P. of M.*, ii, Pt. II, p. 737, Fig. 470, and cf. p. 534, Fig. 337 (where another is shown from the Tomb of User-Amon) and Fig. 338.

Early tablet of class B with 'rhytons' and Vapheio Cups.

The bull's-head 'rhytons' with which this 'Vapheio' type of cup is here associated are also, like the latter, recurring objects among the gifts of the Chieftains of Keftiu to the Viziers of Hatshepsut and Thothmes III, in the closing decade of the sixteenth and the beginning of the fifteenth century B.C. At the end of the second register a single unit follows this sign, but the place of the larger bull's head above tends to show that there were at least three unit strokes in the missing corner of the tablet. The last sign-group of line 2 was undoubtedly repeated in the third line, the Υ only being wanting.

Services
of vessels

On the fragment, Fig. 712,¹ we see two small 'services' or sets of vessels, recalling the silver service, consisting of a high-spouted 'cream

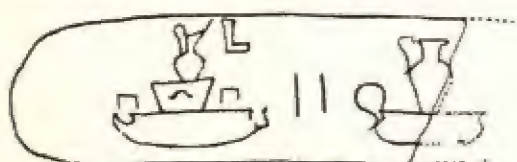


FIG. 712. TABLET WITH TWO SETS OF VESSELS:
DEPOSIT OF 'VASE TABLETS'.

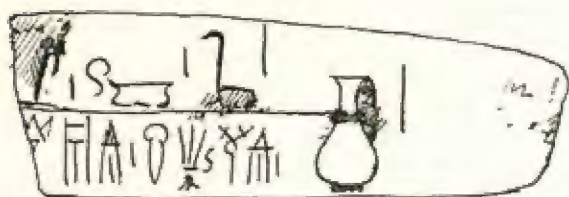


FIG. 713. 'VAPHEIO' CUP (IMPERFECT), BOWL,
LADLE, AND JUG ON 'VASE TABLETS'.

Fig. 713, on the other hand, we see what may well be another 'set' separately delineated. Of the first sign little remains but the outline so far as preserved, and the traces of the handle conclusively indicate that it was a high cup of the Vapheio type. This is followed by a handled bowl, a ladle, and a jug, the handle of which is partly obliterated. It seems to have had a raised ring round its neck.

Signs of
script re-
lating to
vessels.

The vessels of this class of tablets are often marked or specially associated with signs of the Linear Class B. The connexion of the compound sign Υ with a plain bowl has been already illustrated.⁴ In Fig. 714, *a*,

¹ See, too, *P. of M.*, ii, Pt. II, p. 633 and Fig. 397.

² *Ib.*, ii, Pt. I, p. 387 and Fig. 221.

³ *Ib.*, ii, Pt. II, p. 641 seqq.

⁴ See above, p. 623 and Fig. 609 *d*.

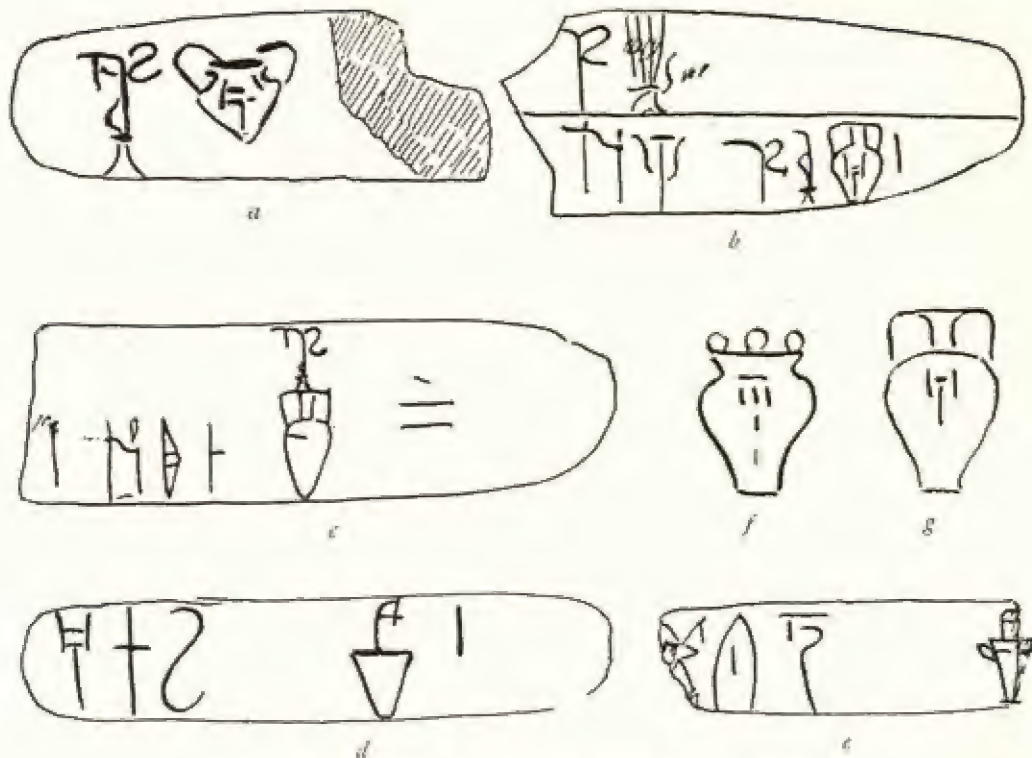


FIG. 714. VESSELS ASSOCIATED WITH SPECIAL SIGNS.



FIG. 715. FRAGMENT SHOWING VESSELS AND 'CUIRASS': VASE TABLET DEPOSIT.

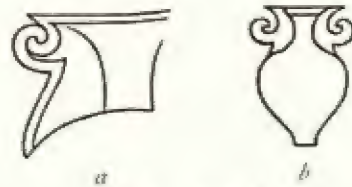


FIG. 716 a, b

this is set before a two-handled cup of inverted conical shape, upon which the 'double-axe' sign \mathbb{H} appears, rather skewly delineated. In Fig. 714, *c* the compound sign rises from above the mouth of a two-handled 'amphora' of the usual type. On another fragment, *b*, we see two of the elements \mathbb{P} (in its completer shape) and \mathbb{I} of which this compound sign is formed, placed separately before a two-handled vase of the same 'amphora' type, itself

marked, as on the handled bowl, *a*, with the H —a frequently recurring sign on these 'amphora' types (as *g*). In *d*, *e* we see the P sign, alone, set above a plain or handled pot. A kind of three-handled cauldron (Fig. 714, *f*) that appears on a fragment of another tablet is interesting from its being marked by what has been called above the 'drop' sign, associated with libation vessels and, probably, signifying 'water'. This recurs on the two-handled bowl in the second register of Fig. 715, and it is interesting to note that a similar sign with three additional 'drops' below appears at the end of a graffito inscription on the rim of a large clay jug from the 'Temple Repositories'.¹

The two-handled bowl on the tablet, Fig. 715, shows what appears to be the M . It is followed by numerals = 30. The object on the third line, of which sixteen examples seem to be enumerated, must probably be regarded as a variant of the 'cuirass' sign seen on the 'Chariot tablets'.² At the end of line 4, followed by a single cipher, is a two-handled pot with three legs.

That in these cases we have to do with metal vessels may be gathered, among other features, by the somewhat angular bend of the handles, and in one exceptionally decorative example, Fig. 716 *a*, *b*, by the elaborate coils into which the handles are twisted.

Comparison of 'Labelled' Vessels on 'Vase Tablets' with Similar Representations on Tablets from Hagia Triada.

It is interesting to note that the tablets of Figs. 714 and 715 showing signs superposed find a close parallel on others of the same class from Hagia Triada, which, as already suggested, though epigraphically grouped with Class A, may in cases have overlapped Class B at Knossos. A good

¹ *P. of M.*, i, p. 617 (inset), where, however, the connexion of this sign with water was not recognized.

² Its upper outline is identical with the conventionalized cuirass as seen on that series, and the square form also occurs.

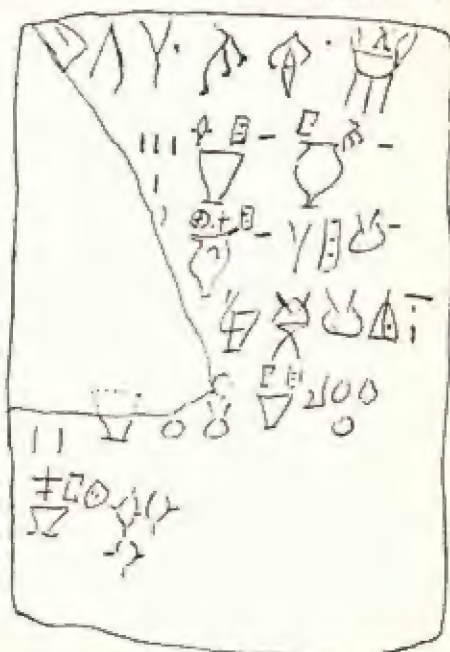




FIG. 717. TABLET FROM HAGIA TRIADA, SHOWING VESSELS WITH SIGNS SUPERPOSED.

example is given in Fig. 717, where the bronze tripod with up-raised handles is of special importance.

As to the import of the signs associated with the different types of vessels here illustrated no certain conclusion is possible. These may, indeed, have well had a different signification in various cases. The 'double axe'  may naturally be interpreted as a consecrating symbol. The 'water' sign, , as naturally, refers to the contents. The groups on Fig. 717 are possibly personal names.

Hoard of Tablets referring to Painted Clay 'Stirrup Vases' from Area above 'Early Keep'. Its Stratigraphic Relations.¹

Tablets from another deposit on the Northern border of the building

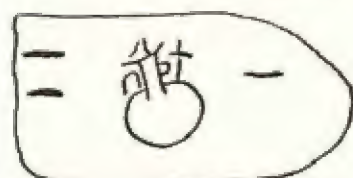


FIG. 718. 'STIRRUP' VASE ON FRAGMENT.

unquestionably related to painted clay vessels, in all cases of the 'Stirrup Vase' or 'Bügelkanne' class. A scattered fragment of the kind, Fig. 718, had already come to light, presenting what seems to be a globular example of this type. The deposit referred to, however, illustrates a distinctly high form, apparently, indeed, of somewhat more elongated proportions

than the fine Palace Style specimen with the octopus and early three-C pattern from the South-West angle of the building.¹

The stratigraphic relations in which the deposit of 'stirrup-vase tablets' was found are themselves of great interest. The area in which it lay—situated a little West of that into which the 'Saffron Gatherer' fresco had fallen—belonged to the Palace system superposed over the filled-in, 'deep-walled' pits of the 'Early Keep'. But, during the period that immediately succeeded the final overthrow of the Palace as a royal residence, this area, as also a section of the Northern Entrance Passage on its Eastern border, had been made use of by native potters to store their wares—perhaps in the latter case to expose these (including a series of curiously linked double jars) for sale to those making their way up to what had formerly served as the Central Court of the Palace.

The area where the 'Stirrup-vase tablets' were found, West of this

Hoard of Tablets referring to clay 'stirrup vases'.


Stratigraphic relations of Deposit.

¹ See above, p. 355, Fig. 298. As the lower part of this vessel is wanting its proportions may have been slightly more elongated. A 'stirrup

vase' of a more globular form was found in the Royal Villa (*Id.*, p. 354, Fig. 297 a, b).

Entrance Passage, had been partitioned anew by the Re-occupation folk, and a small pottery store had been formed, the North wall of which ran over the chamber in which the tablets lay, covered by a shallow accumulation of soil. This layer, about 20 cm. thick, including the clay floor above, had given very insufficient protection to the clay tablets themselves, which were found in a much decayed and generally obliterated condition. Enough remained, however, to show that they referred, like one of the best preserved of them given in Fig. 719, to stirrup vases, which, from the large numbers attached to them, could not well have been of any other material than painted clay. It will be seen that two single items on this fragmentary inventory refer in each case to 900 of these.

The stirrup vases marked by Double Axe sign.

It is interesting to note that these were marked with the same  that recurs on a number of metal jugs delineated on the 'Vase tablet' series. This sign, as already noted, can be traced back by intermediate stages to the

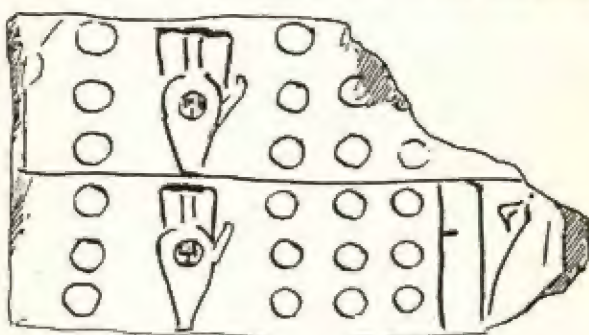




FIG. 719. 'STIRRUP' VASES MARKED WITH  SIGN ON TABLET.

Double Axe of the Hieroglyphic Class—running parallel with another sign  derived from the single-edged weapon. As representing the sacred weapon of the central Minoan Cult, it may thus be taken to indicate that the vessels or objects marked by it were the property of the Priest-kings or, at least, of special shrines within the Palace precincts. It is worth remarking, moreover, in this connexion that this sign forms the initial of prominent sign-groups on the cups with ink-written inscriptions found in the Sanctuary Chamber above the Basement of the Monolithic Pillars.¹ It recurs again at the beginning of the graffito inscription on the M. M. III jar from the South-West Basement. A form of it appears by itself on the L. M. III Theban vases.²

Clay floor with mature L. M. III stirrup vases

Curiously enough, on the floor of the apartment built by the later occupants of the Palace site, were found remains of several painted stirrup vases, three of them, of somewhat tall proportions, being almost completely preserved. These, in two cases, displayed octopods in a mature L. M. III style (see Fig. 720, *a*), while the third, *b*, well illustrates their prolonged coils

¹ *P. of M.*, i, pp. 587, 588, and Fig. 431; and for the inscriptions, pp. 614-16, Figs. 451, 452.

² See below pp. 740, 741 and Fig. 727, 23 *a*, 23 *b*.



a



b



c

FIG. 720. L. M. III 'STIRRUP VASES' AND STRAINER FROM FLOOR OF RE-OCCUPATION PERIOD, ABOVE CHAMBER CONTAINING TABLETS.

as adapted to form an independent decoration of the sides of clay vessels and coffins (*larnakes*) of the L. M. III *b* phase (Fig. 720, *b*). With these were

also found the perforated disk-shaped utensil, Fig. 720, *c*, with a low rim, which had possibly served as a cheese-strainer—showing a late form of the 'adder-mark' motive—and five two-handled pots, or 'amphoras', of pale plain clay. This late chamber was called at the time the 'Room of the Bügelkannes'.¹

The ceramic remains here, like other similar deposits of what may be called the post-palatial class throughout the building, mark the extreme limit of its re-occupation by the later squatters. Among these contemporary deposits the nearest parallel was presented by the store of 'stirrup vases' and two-handled pots of about the same size on a plaster floor, about 25 cm. above the level of the remains of that of the 'Archives' Room of the Late Palace, itself associated with sealings and tablets of Class B.

The stratification revealed, both in that case and by the 'Room of the Stirrup Vases', is of great importance in its bearing on the chronology of the latest deposits of tablets of the Linear Class B within the Palace. Not only are these separated in date by an interval marked by the gradual deposit of about a quarter of a metre of surface earth from the deposits of pottery found above them, but the later vase decoration represented by these shows several degrees of decadence when compared with the fine 'Palace Style'.

¹ See A. E. *Report, Knossos 1900* (*B.S.A.*, vi), p. 44.

Decisive evidence for relative dating of 'Stirrup vase' tablets.

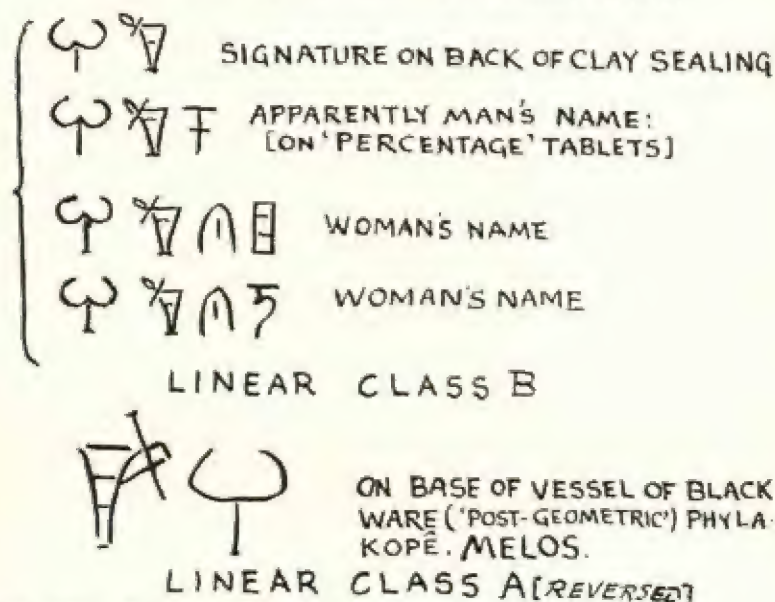


FIG. 721. SIGN-GROUP BELONGING TO PERSONAL NAMES (MALE AND FEMALE) COMMON TO KNOSSOS (CLASS B) AND MELOS (CLASS A: EARLY).
SEE PP. 712, 715.

§ 112. KNOSSIAN SCRIPT B IN MAINLAND GREECE—THE THEBAN EVIDENCE;
SCRIPT B IN CYPRUS: OCCURRENCE OF SCRIPT A ON VOTIVE FIGURINE AT
SAMSOUN, AND PARALLEL EVIDENCE OF ADOPTION OF MINOAN DECORA-
TIVE MOTIVES ON HITTITE POTTERY.

Non-occurrence of inscribed tablets in post-palatial deposits; Painted inscription on L. M. III Sherd from Knossos; Discovery of 'Stirrup-vases' with painted inscriptions of Class B in 'House of Kadmos' at Thebes; Similar from Orchomenos, Tiryns, and Mycenae, and Eleusis; Those from Thebes; Comparisons with Class B—solitary A sign; The Mainland divergence from A tradition—remarkable phenomenon; Probable that Class A was previously known there; Ceramic parallels to intrusion of Class B; Conventionalized vase types, dependent on L. M. II; Also at Tell-el-Amarna; Short interval between fall of the Knossian Palace and Tell-el-Amarna relics; Close correspondence of Theban inscriptions with those of Knossian Palace; Similar arrangement and composition; Examples of identical name-groups; The same language, partly perhaps the same persons; Only occasional adoption of Mainland elements—a few novel signs; the 'Gridiron'; Perhaps badge of Master Cook; Rim of Jar from Asinê with graffito decoration partly suggested by characters of script B; Found in Shrine of traditional Minoan class; Late date, c. 1200 B.C.; Late Minoan Script in Cyprus; Comparisons with Linear Script B and Cypriote Greek; Residium of unknown elements—Earlier Cypriote linear class; Did 'Men of Keftiu' propagate their script on Cilician side? Relics there of an L. M. III Ceramic style; Indications of Minoan contact with Pontic region; Two-stalked L. M. I ivy and 'oats' motive on Vases from Samsoun (Amisos) &c.; Votive clay ram from there with Minoan graffito inscriptions of Class A; Written boustrophêdon, in Hittite fashion.

THROUGHOUT the whole Palace area and in the more or less related buildings, such as the Armoury and the Little Palace, where clay documents had occurred, no single tablet was found belonging to the Reoccupation stratum. Negative evidence of this kind is not conclusive, and, at Knossos at least, the contents of tombs, especially in the Zafer Papoura cemetery belonging to the period that immediately succeeded the final catastrophe of the old Palace, do not convey the idea of any abrupt break in the general course of the local civilization. It is, therefore, likely enough

Non-oc-
currence
of in-
scribed
tablets in
post-pala-
tial de-
posits.

that such records may eventually occur. Nevertheless, the fact remains that no inscribed tablets have come to light, either at Knossos or on any other Cretan site, of later date than the time of the great Catastrophe.

In Mainland Greece and the East Mediterranean outposts of Minoan civilization such as Cyprus, though the occurrence of inscribed clay tablets has not been recorded, the tradition of written documents continued, either in the shape of inscribed vases or other relics. Of such objects one example, indeed—a painted sherd—was brought out from a later deposit within the Palace area at Knossos itself.

Painted L. M. III Sherd with Sign-group of Class B from Palace Site.

Painted
L. M. III
sherd
from
Knossos
with in-
scription.

In disturbed earth low down within the light-well of the Hall of Colonnades, evidently fallen from above, was found the dark on light painted fragment (Fig. 722) presenting a linear inscription. It is the only example from Knossos of a painted inscription on a vase.

The vessel itself seems to be some kind of bowl with horizontal handles, and the horn-like decorations on either side of one of these joined on left by a triple band answer best to decorative motives of the mature L. M. III class. On the other hand, the superior quality of the glaze here visible might at that time be regarded rather as a characteristic of Mainland, Mycenaean technique.

The inscribed vessel clearly dates from the early phase of the Re-occupation period on the Palace site. The signs of the inscription itself are, at the same time, of Knossian tradition, the characteristic middle sign, answering, in a slightly accentuated shape, to the 'rudder' seen on a tablet

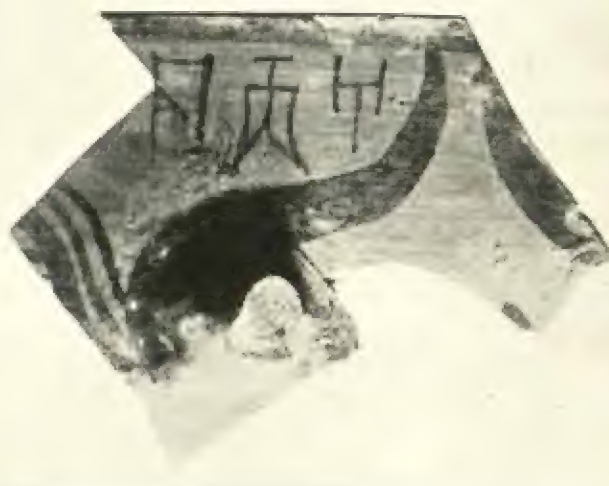


FIG. 722. FRAGMENT OF L. M. III BOWL WITH PAINTED INSCRIPTION, FROM KNOSSOS.

of the B series.¹ Whether another sign-group preceded this must remain uncertain.

The Orchomenos Inscription and Mainland Group.

The occurrence of a 'stirrup vase' from Orchomenos with a linear inscription² of an unusual kind (Fig. 723) had been known since 1904,³ and remains of similar vessels, mostly of a very fragmentary nature, representing one or more signs, derived from Schliemann's or Tsountas' excavations at Mycenae, existed in the Museum at Nauplia, though little attention had been paid to them.⁴ Inscribed pottery of an identical class had also been brought out by the German excavations at Tiryns,⁵ photographs of which have been kindly placed at my disposal. Much of this evidence was fragmentary, though it was possible to put together a series of complete examples, given below. Its collective value, however, has remained unrecognized.

Inscribed
'Stirrup
Vase'
from
Orcho-
menos.

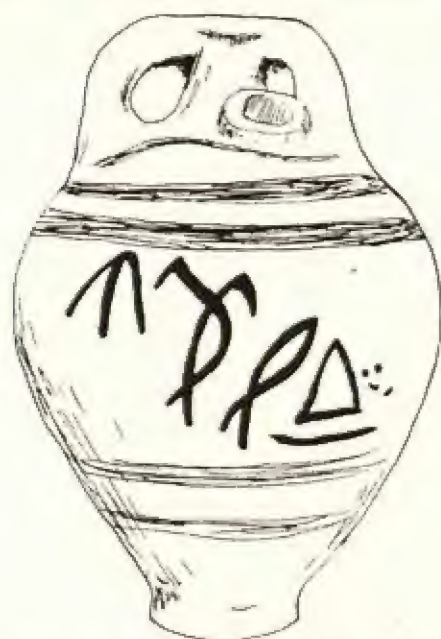


FIG. 723. INSCRIBED 'STIRRUP VASE'
FROM ORCHOMENOS.

The Inscribed 'Stirrup Vases' of the 'House of Kadmos' at Thebes.

But the finds thus held in suspense attained a new significance by the discovery of Dr. A. D. Keramopoulos, in the course of his fruitful explorations in a part of the 'House of Kadmos' at Thebes, of a store-room containing some thirty large 'stirrup vases' with inscriptions on the shoulders or body.⁶

Discovery
of 'In-
scribed
Vases' in
'House of
Kadmos'
at Thebes.

¹ See Table, Fig. 666 A (opp. p. 684). The initial Π of the inscription shows an early feature in its reduplicated lower cross line.

² The Δ at the end of this inscription recurs as a complementary B character between the 'legs' of χ . It is also found on a Tylissos tablet of Class A.

³ H. Bulle, *Die Woche*, 1904, Heft 5, p. 216, and see *Scripta Minoa*, i, p. 57, Fig. 31.

⁴ Two of these fragments, however, were published by Mr. A. J. B. Wace in *B.S.A.*, xxv, pp. 20, 21 and Fig. 5.

⁵ There is only a brief mention of these in the great work on the German excavations there (*Tiryns*, ii, p. 3).

⁶ The discovery (made in 1921) is referred to by Professor Keramopoulos in *Πρακτικά*, 1922-1923, pp. 30, 31. Cf. too, *ib.*, 1928, p. 61. It was mentioned by Mr. Wace (*J.H.S.*, xli, *Archaeology in Greece*, 1919-1921, p. 273).

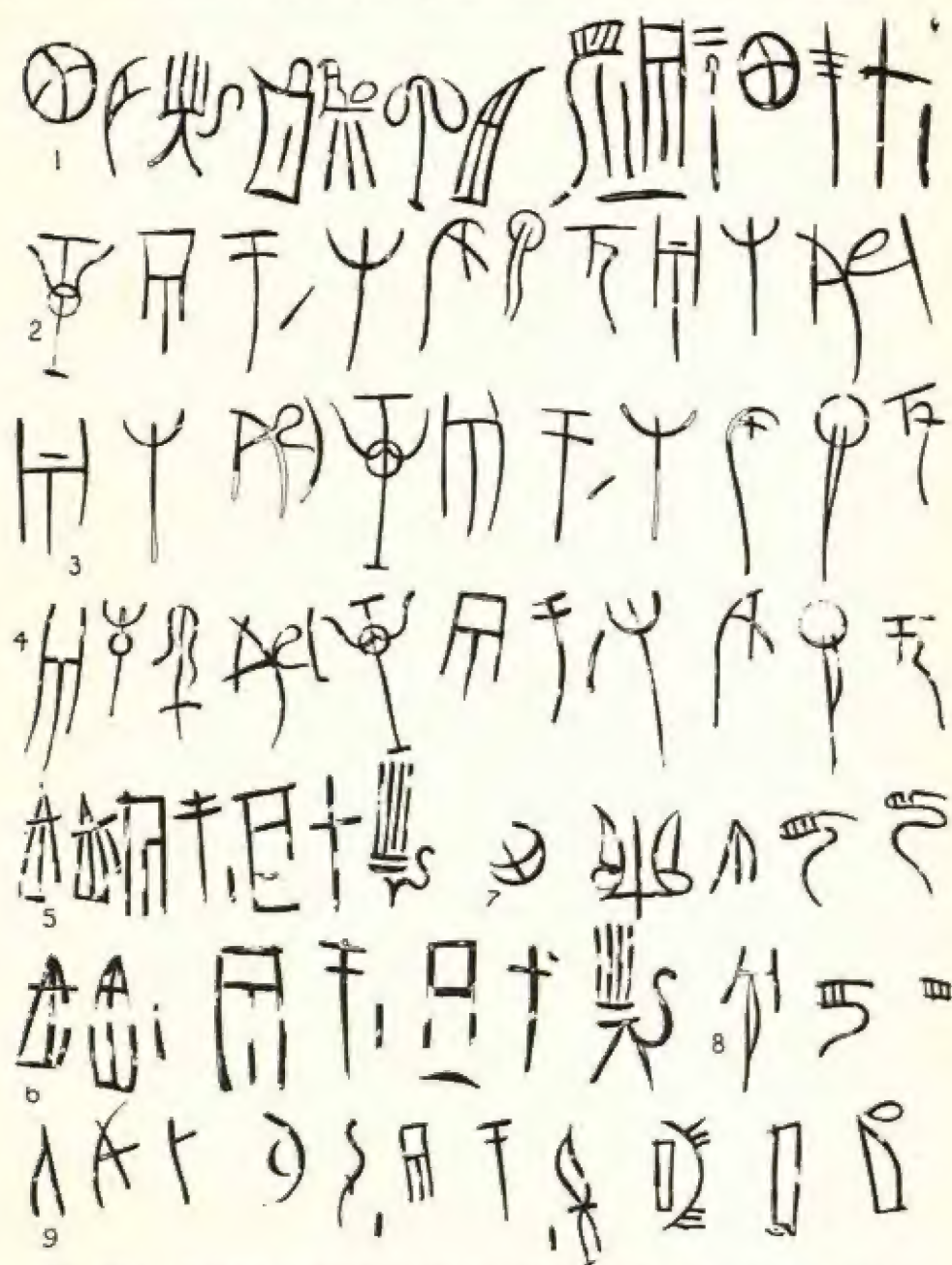


FIG. 724 a. PAINTED INSCRIPTIONS ON CLAY 'STIRRUP VASES' FROM STORE-ROOM OF 'HOUSE OF KADMOS' AT THEBES.

The stratigraphic evidence for the date of the deposit is itself well ascertained. The fine remains of frescoes on the walls of the contiguous hall and corridors, such as the female figure holding a bunch of lilies and

a two-handled vase, themselves show a distinct echo of the Knossian school. These remains, too, were associated with fragments of small painted vases in the Tell-el-Amarna decorative style of the Tell-el-Amarna class.¹ (See below, Fig. 730.) The walls of this part of the building, moreover, were embedded in a stratum answering to L. M. II.²

Thanks to the kindness of Professor Keramopoulos and of the Greek



FIG. 724 A. PAINTED INSCRIPTIONS ON CLAY 'STIRRUP VASES' FROM STORE-ROOM OF 'HOUSE OF KADMOS' AT THEBES.

Archaeological Society in reserving me the task, it is possible here for the first time to supply full reproductions of this group of ceramic inscriptions³ (see Figs. 724 a, b), the result of more than one visit to Thebes, where the specimens in the Museum were placed at my disposal.⁴

My researches in the Museum at Nauplia regarding the inscribed sherds from excavations at Tiryns and Mycenae there preserved were supplemented by the courteous action of Professor Karo, at present Director of the German

Remains
of similar
inscribed
vessels
from

¹ See, for instance, the part of a painted bowl reproduced together with fragments of the frescoes in 'Εφ. 'Αρχ., 1909, Pl. III, 10. For the female figure with the lilies and vase, see 'Αρχ. Δελτίον, iii, p. 339, Fig. 193.

² Keramopoulos, Πρακτικά, 1928, p. 63.

³ A preliminary account of these inscriptions was given by me to the International Prehistoric Congress at London (Sept. 1932),

and on November 22, 1932, to the Hellenic Society (*J.H.S.*, 1933). See, too, *Times Literary Supplement*, Dec. 1, 1932.

⁴ Monsieur E. Gillieron, fils, who accompanied me, copied the inscriptions under my superintendence with great accuracy. One circumstance, however, that must be borne in mind is that, owing to a certain superficial decay, parts of several signs had disappeared,

Tiryns
and My-
cenae.

Archaeological Institute at Athens, in sending me photographs of those brought to light by the German Excavations. It is thus possible here to reproduce seven complete groups together with three single signs on vases (Fig. 725).

The class of material on which these inscriptions are found is itself



FIG. 725. SIGN-GROUPS AND SINGLE SIGNS ON 'STIRRUP VASES' FROM TIRYNS (Tl.), MYCENAE (MYC.), AND ORCHOMENOS (ORCHO.).

curiously limited. In all cases, including the somewhat abnormal sign-group from Orchomenos, they occur on the body, shoulders, or neck of 'stirrup vases' of somewhat high proportions. That from Orchomenos and most of those from Thebes showed a plain clay face with dark bands and inscriptions. Many examples from Tiryns and Mycenae, however, presented a purplish or reddish brown surface on which the signs and decorative details were superposed in white—suggesting a general resemblance to M. M. III ceramic fashion, which, as already noted, had at first misled me regarding some of the Re-occupation pottery at Knossos. Restored drawings of two Tirynthian specimens of the inscribed 'Bügelkanne' class, illustrating both these styles, are given in Fig. 726 *a, b*.

Apart from the overwhelming elements of correspondence in the painted signs themselves with those of Class B, this whole Mainland group of vessels thus marked fits on to a series that has already found illustration on the late palatial tablets of Knossos. There, as already shown,¹ we find a variety of vase types associated with special single signs—some of these placed above or beside them, some with the characters inscribed on their sides. These signs had certainly some direct reference either to the contents of the vessels or as marks of dedication for their use in the Palace-Sanctuary.

It is clearly in the latter association that the 𐀓 , or conventionalized Double Axe, thus appears in a solitary position on the 'stirrup vases', of which such large stores are recorded on the tablets of the hoard in the North Quarter of the Palace.² It is therefore of interest to find the same sign, in the same way in a solitary position, marking sanctuary property on similar vessels from

¹ See above, p. 731.

² See above, p. 734, and Fig. 719.

Signs
corre-
spond to
linear
Class B.

Double-
Axe char-
acter on
Knossian
Vases.

Tiryns and the House of Kadmos. Here we see an identical usage, taken over with the same religious purpose, inherited in the Mainland centres from the great Cretan Palace. (Fig. 727, No. 23, *a, b*.)

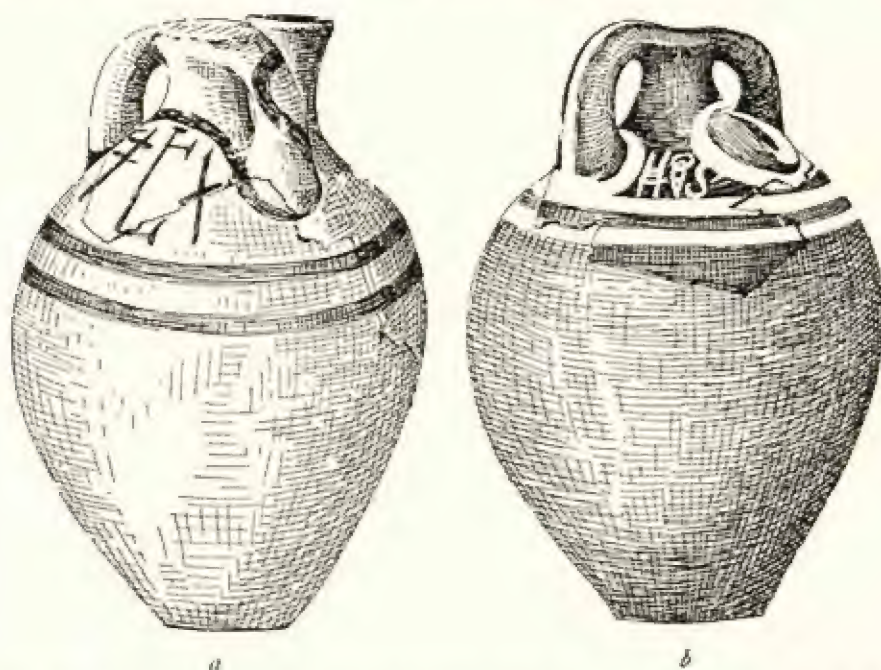


FIG. 726. 'STIRRUP VASES' FROM TIRYNS, WITH PAINTED INSCRIPTIONS: *a*, WITH LIGHT GROUND; *b*, WITH DARK.

The 'wheel' sign ⊕ (No. 24, *a, b*) also seen at Tiryns (Fig. 725 *g*) and the 'cross' + (originally a stellar emblem), seen on L. M. III 'stirrup vases' from Mycenae, may have had a similar consecrating value.

At Mycenae itself, except for this and the 'arrow' sign, ↑—also by itself—in white on a dark ground,¹ the evidence of such painted inscriptions is at present confined to isolated characters. At Tiryns, however, there is evidence of the labelling of such vases by a series of sign-groups, of which two completed examples, in both the light on dark and dark on light styles, are shown in Fig. 726. In the store-room of the Theban Palace, however, the vessels themselves were

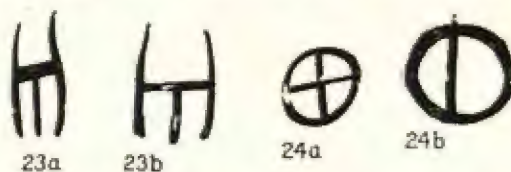


FIG. 727. SINGLE SIGNS ON THE THEBAN VASES.

¹ See Table, Fig. 725 *h*.

The inscribed
pots from
Thebes.

much more perfect, and in several cases they presented a series of three or four sign-groups, including in one instance (Fig. 724 *a*, 1) thirteen characters.

Specimen
from
Eleusis.

In all, the Theban deposit supplied twenty-eight different examples of inscribed 'stirrup vases', some of them repeating the same sign-group. In the longer inscriptions, Nos. 2-4, similar groups are differently arranged.

The excavations of Prof. Kouroniotes at Eleusis have now brought out a similar stirrup-vase with a three-word inscription (Suppl. Pl. LXIX)¹ in two lines. The signs again are typically Class B: Ψ and ⚡, better than the Theban examples. The initial pair of l. 2, ⚡ Ψ, recurs among Knossian name-groups.

Compari-
sons with
linear
Class B.

The Comparative Table, Fig. 728, speaks for itself. Specimens of signs selected from the whole Mainland Group are there compared with similar characters of the Linear Class B, the peculiar product of the last Palatial Age at Knossos. The correspondence of the signs on the vessels with these at once leaps to the eye. It is detailed in its manifestations, and overwhelming in the proportion that it bears to the number of known Mainland characters. Of the forty-five comparisons given in the Table only two or three can even be regarded as uncertain.² Considering that there are not more than forty groups and a few odd signs in all available belonging to the Mainland series, the number of correspondences with Class B is truly remarkable. This identity is moreover established in a series of forms typical of this later Script, and which do not occur in Class A. Among these are the 'whip' ⚡, the single-edged axe ⚔. Nos. 30 ⚡, 31 ⚔, 40 ⚔, and 51 ⚔. 'The throne and sceptre' seen here is also of the later Knossian kind, and the Ψ, here repeated, is of the Egyptianizing double *Uraeus* type first seen in Class B.

Solitary
sign bor-
rowed
from
Class A.

Of signs peculiar to Class A, Λ and its possible variant λ alone appear—a phenomenon which, as we shall see, also recurs in the case of the Cypro-Minoan group. The character which combines ⚡ with a form of Ψ—see Fig. 724, *b*, No. 20, also suggests composite forms of the earlier Script. Otherwise there is nothing here distinctive of it, while six, or perhaps seven, out of the ten characters enumerated above³ as peculiar to Script B, are included in this evidently very incomplete series of Mainland signs. These, as we have seen, represent the signary brought into use by the late Palatial scribes of Knossos.

¹ *Arch. Δελτίον*, 1931-2, Παράρτημα, p. 23, Fig. 26. The copy was kindly supplied me by Prof. Kouroniotes.

² The 'leaf sign' No. 28 is only represented

by incomplete examples. The equivalent of No. 36 at Tiryns is doubtful; the 'loop' sign (B Suppl.) is reversed at Orchomenos.

³ See p. 683, Fig. 664.

SCRIPT B KNOSSOS	THEBES = TH MYCENAE = MY TIRYNS = TI	SCRIPT B KNOSSOS	THEBES = TH MYCENAE = MY TIRYNS = TI	SCRIPT B KNOSSOS	THEBES = TH MYCENAE = MY TIRYNS = TI
1 AA	A ^{TH.} A	20		41	
2	A ^{TH.} A	21		44	
4		23		45	
5		25		46	
6		26		47	
7		27		49	
8		28		50	
9		29		51	
11		30		52	
13		31		53	
17		36		54	
18		37		55	
19		40		56	
20		59		60	
42		90			

FIG. 728. TABLE SHOWING MAINLAND SIGNS COMPARED WITH CLASS B AT KNOSSOS.

Mainland divergence from tradition of Class A, a remarkable phenomenon.

This divergence from Class A is the more remarkable when we consider the antecedent stages of the Mainland Minoan branch. Its best artistic products—as seen, for instance, in the contents of the Shaft Graves at Mycenae—reflect the earlier and the mature phase of L. M. I or the still more brilliant transitional M. M. III epoch that had preceded it, and the whole period comprised corresponds with the duration of the earlier linear Script on the Cretan side.

Probability that Class A had been known there.

The varied and omnipresent manifestations of the earlier Late Minoan phase, in every branch of life, throughout the wide area over which it was at that time implanted, both in the Peloponnese and in Northern Greece, had by this time formed of Crete, and of what was afterwards Hellas, an inseparable cultural unit. It is surely inadmissible to suppose that the mere crossing of a comparatively narrow arm of sea deprived one half of this cultural realm of what to the other was the highest mark of its progress on the road to high civilization—the Art of Writing.

It must be accepted as axiomatic that the knowledge and practice of the Linear Script A was introduced at this time on the Mainland side, and the absence of clay tablets should be rather set down to the accidents of discovery or to climatic causes.

It follows that, according to every presumption, the script, of which we have now the evidence on a special class of objects belonging to the initial phase of the succeeding L. M. III Period, would turn out to be an offshoot of Class A. Influenced by that presumption I had myself regarded the 'stirrup vase', with four painted signs, from Orchomenos—at one time the only known example of the Mainland group—as belonging to Class A.¹ Though the signs on this, however, present some abnormal features, the balance of evidence may be thought here, too, to incline in favour of Class B.²

Parallelism between the Mainland Adoption of Script B and the Rise of the 'Mycenaean' Class of Ceramic decoration : both affiliated to Knossos.

Ceramic parallel symptoms to intrusion of

The intrusion at this time on the Mainland side of this specifically Knossian form of script in fact fits in with other contemporary phenomena relating to this Northern area of the culture, for the first time brought into relief in an earlier Section of this Volume.³ It is there shown from the

¹ *Scripta Minoa*, i, p. 57.

² The second sign is regarded in the Comparative Table, Fig. 728, as akin to B 46, the third is B Suppl. 2 reversed; the 'triangle' sign at the end of the group was also known

to Class B. The apparent numeration at the end, however, three pellets and a dash, seems to answer to the earlier tradition.

³ See above, p. 371, seqq.

ceramic evidence that the Minoan cultural domain, after being split in two by the rise of a great dynastic power at Knossos, shows a tendency to a certain reunion in the succeeding epoch that marks the rise of the L. M. III phase—which eventually became a diffused ‘Mycenaean’ style.

late Knossian script on Mainland side.

Up to the date of the great Catastrophe, about the close of the Fifteenth Century before our era, the brilliant though strictly conventionalized ‘Palace style’—also shared by Argos on the Mainland side—distinguishes the direct domain of the Priest-kings from the rest of the Minoan area. To a certain extent in Crete itself, and still more widely overseas, the L. M. I *b* system—the most beautiful of all in decorative design—out of which the more formal ‘Palace style’ of Knossos was itself developed, still, awhile, held its own—finally becoming dead-alive in the shape above generically described as ‘L. M. I *c*’.

The contents of the tholos tombs show that at Mycenae, and many other Peloponnesian sites, the later phase of L. M. I *b* marks the end of their true history apart from the relics of a later re-occupation. At Thebes—as we learn from a series of tomb-groups—this style was contemporary with the earlier House of Kadmos. But in the later residences alike at Mycenae, Tiryns, and the Boeotian Thebes, the degraded ‘L. M. I *c*’ tradition then existent is largely broken by the entry on the scene of a new and very conventionalized ceramic class which, though not actually Knossian, stands in a close relation to its L. M. II style.

Appearance there of conventionalized ceramic Class dependent on L. M. II of Knossos.

It is this ceramic class that characterizes the archaeological stratum to which these inscribed stirrup vases belong, whether at Tiryns and Mycenae or on the Boeotian side. Its special concomitant is a series of decorative motives derived from the conventional papyrus designs which, like the octopus, are a prominent feature on the ‘Palace Style’ vases of Knossos. It is significant, indeed, that on a ‘kylix’ from Tomb 505 at Mycenae¹ that produced several samples of this ceramic group, a variety of this kind of spray is seen (Fig. 729, *a*) associated with a derivative form of the ‘two Cs’ motive, the evolution of which from the ‘three Cs’, a geometrically arranged design of the ‘marine’ class, has been traced in a preceding Section.² With it in Fig. 729, *b*, is shown another fragment from the same sepulchral deposit, in which the ‘loop’ form of this motive has possibly affected the decorative end of what was originally the papyrus stem. Designs of this group—labelled thus by what we now know to be the Knossian symbol—are of

¹ Wace, *Chamber Tombs of Mycenae* (*Archæologia*, lxxxii), p. 12 seqq., and patterns and profiles of kylix fragments, p. 17, Fig. 8, from

which Fig. 729 *a, b* is taken (*c* and *g*).

² See above, pp. 314, 315 and Fig. 250, *k*.

constant recurrence on the painted pottery belonging to the closing phase of the later Palace at Thebes, which were contemporary with the inscribed vessels found in the store-room. Fig. 730¹ reproduces a specimen akin to the last-mentioned Mycenae fragment.



FIG. 729. FRAGMENTS OF L. M. III KYLIKES FROM TOMB 505 (DROMOS), MYCENAE. a, SHOWING DERIVATIVE OF KNOSSIAN '2 Cs'.



FIG. 730. PART OF PAINTED BOWL FROM LATER PALACE, THEBES.

Tell-el-Amarna Class also affiliated.

In all these cases, as in contemporary examples from Cyprus and, notably, Rhodes, we recognize a ceramic phase which has a special importance from its reappearance under closely delimited chronological conditions in the painted 'Aegean' sherds of the rubbish heaps of Tell-el-Amarna.

The importance of Akhenaten's new capital on that site dates from his sixth year—1377 B.C.—when his activities there really began. On the other hand, the death of his successor Tutankhamen, smaller relics of whom are not infrequent on the site, is given as 1332 B.C. As the L. M. III sherds found here so abundantly were to a large extent derived from rubbish heaps, the accumulation may have lasted roughly from the beginning of the second quarter to somewhat over the middle of the Fourteenth Century before our era. If therefore, as there are converging reasons for concluding, the great Catastrophe of the Palace at Knossos took place about 1400 B.C., an interval of not more than twenty-five years—a short generation—can be allowed to account for the marked difference already visible in the ceramic style.

Knossian suggestion in Tell-el-Amarna style indicates short interval.

From the first the idea had commended itself that the great days of Minoan Art still stood near enough to the Egypt of Akhenaten for its reflection to be discernible in painted designs of the Tell-el-Amarna Palace. The life and motion of some of the scenes in which calves disport themselves over flowery meads, as seen on the great pavement, breathe the free Minoan spirit. The variety in the floral types itself suggests the same inspiration. *Per contra*, as will be shown below, the hieratic tendency of

¹ See 'Eφ. 'Αρχ., 1909, Pl. II, 10.

the last Palatial Age at Knossos had resulted in a certain assimilation to Egyptian conventionalizing traditions, such as is also traceable in Script B. Attention is called below to new and striking illustrations of this assimilating tendency as visible in the papyrus thickets, amidst which the sacred Griffins

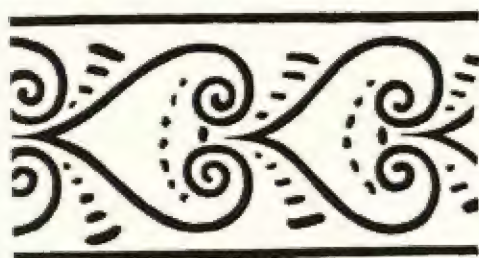


FIG. 731. ON LATE PALACE BOWL: KNOSSOS.

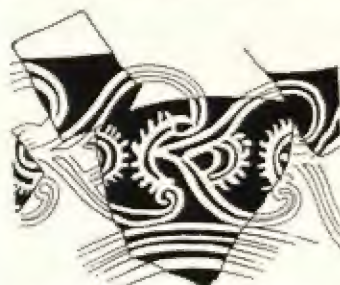


FIG. 732. ON SHERD: TELL-EL-AMARNA.

are seen couched, on the walls of the 'Room of the Throne' at Knossos, and notably, in the remarkable conformity between the variegated sprays seen on the 'incense burner' associated with the last interment of the Temple-Tomb and those on a polychrome vessel from Tell-el-Amarna.¹

In all this we have the evidence of a distinct approximation in date of the last palatial elements at Knossos to those of Akhenaten's foundation at Tell-el-Amarna. There have been recorded, indeed, on that site one or two fragments that fit on very closely to fabrics in vogue at Knossos itself, about the time of its great Catastrophe. A fragment of a piriform vessel, the light on dark technique of which at this time suggests a Mainland origin, itself stands in close relation to an L. M. II adaptation of the 'Sacral ivy' chain pattern and an echo of a similar type may be traced on a bowl fragment from the East side of the Palace site at Knossos (Fig. 731). A considerable proportion, indeed, of the Tell-el-Amarna types present conventional details derived from the L. M. II style of Knossos.²

Striking as is the falling off visible from the good L. M. II style, the interval of time between its vogue in the great Cretan centre and the general diffusion of a L. M. III class largely dependent on it must for cogent reasons have been of comparatively short duration.

What has been said above supplies cumulative proof that the ceramic history of the 'diffused Mycenaean' style runs parallel with that of the Mainland script. Knossos is the main source of both.

¹ See below, § 117 and Coloured Pl. XXXV.

² As, for instance, a repeated ornament recalling a thickened N, and undulating hori-

zontal lines taken from octopus tentacles, and a form of pendant spray (*Tell-el-Amarna*, Pl. XXVIII, 63).

**Detailed Comparisons of Mainland Signs and their Groups to
Class B of Knossos.**

Close correspondence of Mainland inscriptions with those of Knossian Palace.

The inscriptions of the Mainland offshoot of Class B, the history of which forms part and parcel of that of the associated ceramic motives, in some cases give evidence of such close agreement with their Knossian

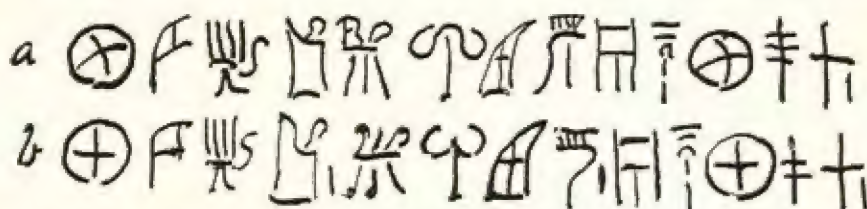




FIG. 733. *a*, INSCRIPTION NO. 1 FROM THEBES; *b*, TRANSLITERATION INTO NORMAL CHARACTERS OF CLASS B AT KNOSSOS.

palatial prototypes as equally to entail the conclusion that they were separated from the other by only a short interval of time.

One or two signs, indeed, such as the  and , show a certain falling away from the original types, but the general resemblance is often so close that we might well seem to have before us documents in the same 'Court hand'. In some cases—as in the long inscription No. 1, consisting of thirteen characters—every single sign transliterates itself into almost identical equivalent forms of Class B (see Fig. 733).

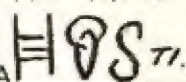
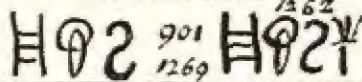
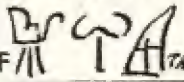
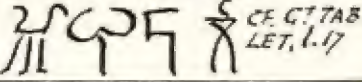
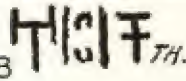
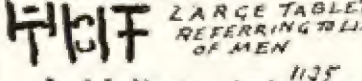

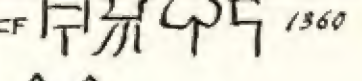
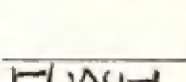
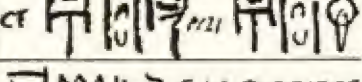
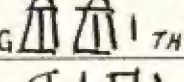
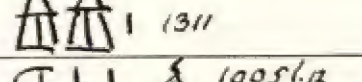
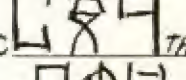
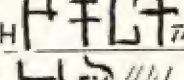
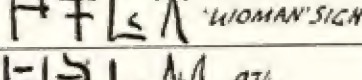
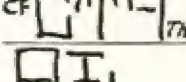
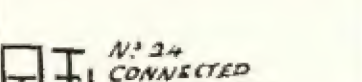
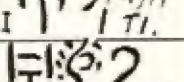
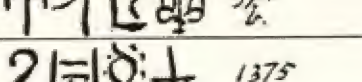
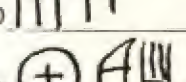
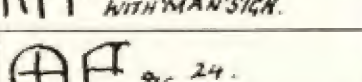
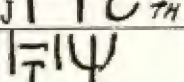
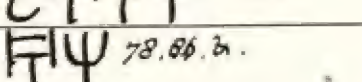
Similar arrangement and composition.

The groups themselves—consisting, as in the other case, from two to five signs—show the same marks of division by vertical strokes, as well as many correspondences in the elements of their composition. What, however, is of capital importance—especially when we consider the limited number of specimens of sign-groups of the Mainland class available for comparison—is the fact that in several cases they actually correspond with similar groups occupying prominent places on the late palatial tablets of Knossos.

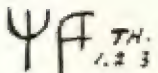
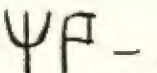
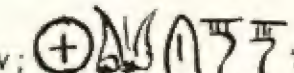
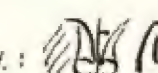
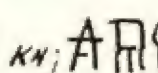
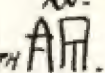
Identical name-groups.

It has been demonstrated in the preceding Section that an extensive class of sign-groups on the tablets, which generally either stand by themselves or occupy initial positions, and are often of larger dimensions than those of the signs that follow them, must be regarded as representing the actual names of individuals of either sex or, in some cases, their functions or profession. Many of these groups, as we have seen, have the 'man' or 'woman' sign actually attached. A still larger number of sign-groups of identical composition and of similar prominence must clearly be accepted in the same manner, though the human ideogram be not appended, and

may be reasonably interpreted in the same way as personal names or titles. In other cases, where we see part of a similar group of signs with a different

MAINLAND INSCRIPTIONS TH = THEBES TI = TIRYNS	SIGN GROUPS ON TABLETS OF CLASS B AT KNOSSOS	MAINLAND INSCRIPTIONS TH = THEBES TI = TIRYNS	SIGN GROUPS ON TABLETS OF CLASS B AT KNOSSOS
A  <i>TH.</i>	 <i>901 1269 1262</i>	F  <i>TH.</i>	 <i>1360</i>
B  <i>TH.</i>	 <i>1125</i>	G  <i>TH.</i>	 <i>1311</i>
C  <i>TH.</i>	 <i>E.W. CORRIDOR (N° 1287)</i>	H  <i>TH.</i>	 <i>1005/12 'WOMAN'S SIGN'</i>
CF  <i>TH.</i>		I  <i>TH.</i>	 <i>974 6.</i>
D  <i>TH.</i>	 <i>N° 24 CONNECTED WITH 'MAN'S SIGN.'</i>	J  <i>TH.</i>	 <i>1375</i>
E  <i>TH.</i>	 <i>24.</i>	K  <i>TH.</i>	 <i>78.86.2.</i>

OTHER PARALLEL COLLOCATIONS

 *TH. 1.2.3*
  *KN.*
  *TH. 1101. 1210*
  *KN.*
  *TH.*
  *KN.*

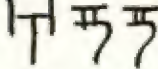
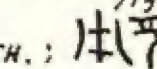
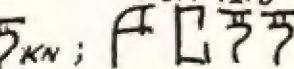
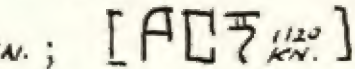


 *TH. 715*
  *KN. 715*
  *KN. 715*
  *KN. 715*

FIG. 734. COMPARATIVE TABLE SHOWING CORRESPONDENCE OF MAINLAND NAME-GROUPS WITH KNOSSIAN OF CLASS B.

termination, we may fairly conclude that it is a variant of the same personal name containing an identical element.

That, considering the relatively small amount of material with which we have to deal in the case of the Mainland series, so many correspondences should occur in these name-groups is in itself remarkable. In the Comparative Table given in Fig. 734, which cannot by any means be regarded as complete, seven sign-groups at least are common to Knossos as well as to Tiryns and Thebes.

A from Tiryns is repeated in an identical form on two Knossian tablets and recurs on a third with another terminal sign added. B reappears

on the large tablet from Knossos containing the lists of men. The terminal sign of c is so roughly executed that it might not be recognized as the 'single-edged axe'  were it not for the parallel supplied by a document from the East-West Corridor of the Domestic Quarter. Of special interest is the name-form  (Fig. 734, g), consisting of the same syllabic character repeated, which reappears on a tablet of Class B¹—separated, as on the Theban pot, from what follows by a mark of division. This repetition of the same syllable in what is presumably a personal name, recurring in a series of examples,² recalls a distinctive characteristic of the Anatolian family—the baby or 'stammer' names³—the *Lallnamen* of German terminology—like 'papa', 'mama', 'nanna', and 'daddy'. On that side, though common as applied to persons, they had a special attachment to the early Religion, and 'papas' as a sacerdotal term has survived to distinguish alike the parish priests of the Orthodox Greek Church and the Pope of Rome.

The Same Language: in cases perhaps the same Individuals.

The same language: in cases perhaps the same persons.

It is clear that both at Knossos and the Mainland sites we have to do with the same language.



























This absolute correspondence, indeed, of a series of name-groups—out of the very limited number recorded—on the 'stirrup vases' of the Boeotian Thebes and Tiryns, belonging to the period immediately succeeding those on the latest clay documents of the Knossian Palace, might even suggest that in certain cases we have to do with the same individuals.

Indigenous Signs taken over in Exceptional Cases.

Only occasional adoption of Mainland elements.

As has been already noted—though, as a whole, the Mainland signary represents the linear Class B of Knossos to an overwhelming degree—one or two signs belonging to this group are clearly survivals of Class A. They may, indeed, be looked on as direct evidence of the former diffusion

¹ No. 1311 of my hand-list.

² E.g.   (1495),   (480),                      

of this earlier form of the linear Script in what is known as 'Mycenaean' Greece—a diffusion which, in spite of the non-discovery of the actual documents, we are bound to suppose had taken place on this side, *pari passu*, with that of the Minoan culture as a whole. Among these signs are Λ and the possibly related λ , to which, perhaps, may be added the conventionalized

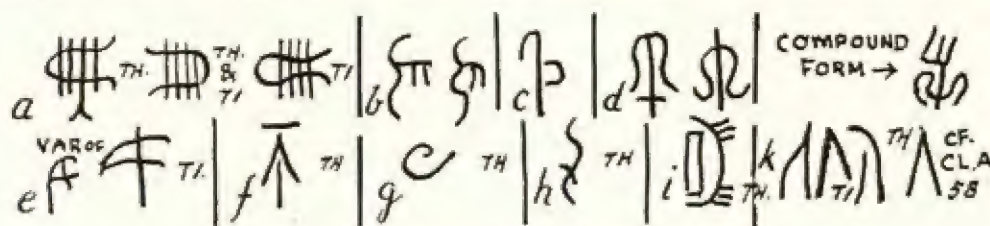


FIG. 735. SIGNS PECULIAR TO MAINLAND GROUP.

'tree' sign with three horizontal bars \equiv . That these signs continued to be employed was possibly due to their peculiar fitness to represent certain sounds of the language as brought over, and which had perhaps been better preserved in the overseas dominion than in the great Cretan centre.

A certain conservatism—as well as innovation—in the spoken tongue is a well-known Colonial feature, and we may best regard this survival of archaic characters as a symptom of a certain differentiation in dialect.

That there is not greater evidence of actual innovation in the Mainland signary is rather a matter of surprise, since changed conditions and even the effects of a harder climate—clearly marked in certain features of the attire—might well be supposed to have been productive of new characters. At every turn, indeed, we are confronted with the evidence of a very definite impress of the latest Palace culture of Knossos.

The wholly new characters that appear on the Mainland pots seem to have been rather ideograms than of purely phonetic usage. The most conspicuous of these are shown in Fig. 735, and they clearly include objects the character of which, in some cases, it is difficult or impossible to determine.

'Gridiron' Sign.

As has been already said, the occurrence of more or less pictorial signs representing objects in groups can at times be explained by the fact that such groups are descriptive of the functions or occupation of the person referred to rather than a personal name. These functions, indeed, may perhaps be revealed to us in the case of another quasi-pictographic sign (Fig. 735, a).

The
'Gridiron'
sign.

Here we see a kind of horseshoe with recurved ends crossed by four bars—in one case provided with a handle. It may be suggested that this

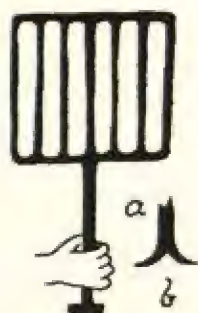


FIG. 736. *a*, GRIDIRON AS EMBLEM OF ST. LAURENCE. *b*, VARIANT OF HANDLE.

sign, found both at Tiryns (where it recurs on several fragments) and Thebes, should be interpreted as some form of gridiron. It is true that in the later forms, familiar from Classical times onwards, the bars are included in or overlaid on an oblong frame, but the curved outline—which would have economized the amount of bronze such as was used for it at that time—does not interfere with the general serviceableness of such a form. The handle itself recalls the gridiron of medieval times as so often placed in the hand of St. Laurence. This, too, is sometimes forked at the end, as seen on a Theban vessel (see Fig. 736 *b*). For suspension on a wall this broadening of the end had a definite utility.

At Tiryns, where this sign is found on at least five fragments, it seems to have stood at the beginning of the inscription, and may have had a separable ideographic meaning. At Thebes, where a handle is actually joined to the grid, it appears in the middle of a group. In this case, too, as in the analogous groups with the 'ship' sign, it may have formed part of a compound name or title. It is natural to suppose that both at Tiryns and Thebes the 'gridiron' referred to the cook's office. At both these royal residences this functionary may well have occupied as important a place as he did in the royal kitchens of medieval times.

Historical Significance of Diffusion of Late Palace Script of Knossos in Mainland Centres.

Significance of diffusion of Knossian Script in Mainland centres.

The conclusion broadly resulting from the above comparisons is of no slight historical interest. That Script B of Knossos—the system of writing that reflected the highly elaborate bureaucratic methods of its later Priest-kings—should reappear in the principal Mainland centres—at Tiryns and Mycenae, as well as Thebes and Orchomenos—in the period that succeeds the fall of the Great Palace is itself an arresting phenomenon. Its reappearance on so many urban sites would naturally imply that the language and script was current at this time not only at the Courts but among the ordinary citizens, both in the Peloponnese and throughout a large tract of Northern Greece beyond the Gulf. It follows that, to at least the middle

of the Fourteenth Century B.C., there is no place either at Mycenae or at Thebes for Greek-speaking dynasts. Apart from certain innovations due to the climate and environment, including the reaction of the older indigenous element, the culture, like the language, was still Minoan to the core.

Decorative Motives on Jar from Late Shrine at Asiné partly suggested by Signs of Script B.

It would be unsafe to bring down the inscriptions of the Mainland Class above described to a later date than the close of the Fourteenth Century B.C.

Was there a still later survival? It is of common knowledge that, outside Cyprus, the Hellenic successors to the Minoan and Mycenaean heritage brought with them, as a result of their extensive Eastern relations in which the Ionians played the principal part, the fully developed Phoenician alphabet together with the Semitic names of the letters.

It is impossible, however, here to pass over an enigmatic find that has been recently made use of to support the view that not only did the Greek occupants on the Peloponnesian side in some sort take over the Minoan script already diffused there, but even that it was through their agency that its later syllabary reached Cyprus.

Among the important discoveries recently made by Professor Axel Persson of the Swedish Mission at Asiné, on the Argolid Coast not far from Tiryns, not the least interesting was a late Shrine, belonging to a private house and containing, among other relics, part of a rim of a large earthenware jar presenting incised signs of a curious character.¹ The offertory vessels and cult images were definitely later than those of the Shrine of the Double Axes (L. M. III b) at Knossos, which it otherwise resembles.² Some continuity of cult, indeed, may be gathered by the presence of its most primitive emblem, a polished stone axe of Neolithic fabric, placed here as a 'thunderbolt' or *κεραυρός*. This late shrine had in fact still preserved, in its rudest form, the same cult as that of the Goddess of the Double Axes in the most elegant of her Palace sanctuaries.

Rimmed
'Jar with
graffiti'
from
Asiné.

All the small painted clay 'idols' found in the shrine show female breasts. Of the larger image found only the head and neck is preserved, and from the elongation of the chin it has been taken to represent a beard.

Found in
Shrine of
traditional
Minoan
type.

¹ See Prof. Axel W. Persson, *Schrift und Sprache in Alt-Kreta* (Uppsala Universitets Årsskrift, 1930 Program 3), and, for the Sanctuary, cf. Prof. Martin P. Nilsson, *The Minoan and Mycenaean Religion* (Lund, 1927),

pp. xx-xxiii, and Plates III and IV.

² Professor Nilsson (*op. cit.*, p. xxi) rightly recognizes the general similarity of this find to the contents of the Shrine of the Double Axes at Knossos.

The whole face, except the eyes and mouth, is painted white according to the feminine convention. There is no indication of a beard, nor have we any call to recognize, in the midst of this motley harem, Dodona's Lord.¹

Late date:

c. 1200

B.C.

The arrangement of the cult objects themselves on an altar bench or ledge recalls that of the late shrine of the Double Axes at Knossos. The deposit itself is best dated by a goblet with a solid pedestal, showing a



FIG. 737. OBJECTS FOUND IN 'SUB-MYCENAEAN' SHRINE AT ASINÈ :
STONE AXE IN CENTRE BELOW.

characteristic swelling, and by the 'Granary' type of two-handled bowl.² These objects (see Fig. 737) are typical of the 'Spring Chamber' deposit at Knossos³ and the Tombs of Karakovilia, and may be probably dated to the close of the Thirteenth or to early in the Twelfth Century B.C.

As a supplement to the contemporary Cretan material it may be thought useful here to insert in Fig. 738 a copy of a clay head of the Goddess from Knossos,⁴ apparently from some very late shrine. Her flat-topped head-gear (itself of Hathoric derivation) supplies an interesting late survival of the adder-mark. The prominent chin is characteristic of such figures, and helps to show that the still more exaggerated version of it visible in the larger head from the Asinè shrine really belongs to a female divinity.


¹ The identification with Zeus was suggested *loc. cit.*

² A. J. B. Wace, *B.S.A.*, xxv, Pl. XI, *h, k, l*.

³ *P. of M.*, ii, Pl. I, p. 128 seqq., and for

comparisons with Karakovilia see pp. 136, 137 and Fig. 70.

⁴ Found, many years since, near the Aqueduct, above the Villa Ariadne (Ashm. Mus.).

The 'tattoo' marks (Fig. 738 *b, c*) on cheek and nose of the head from Knossos are themselves curiously primitive, and recall certain marble figures from Early Cycladic graves. The mark over the nose resembles the familiar  sign, a reminiscence of Script to be here noted. On the neck is a geometrical pattern.

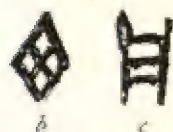
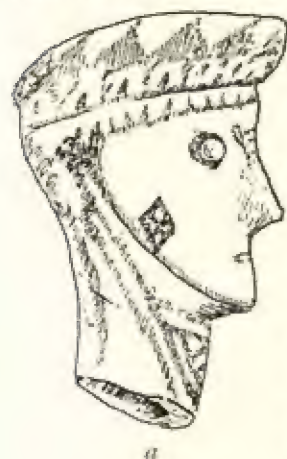


FIG. 738.

a. HEAD OF GODDESS (SUB-MINOAN) FROM KNOSSOS.
b, c. 'TATTOO' MARKS.

The rim of the Asiné jar, on which the graffiti occur, was originally about $5\frac{1}{2}$ feet in circumference, and the section of it preserved is only 13 inches (*c.* 33 centimetres) in length or, as near as possible one-fifth. The only part that presents any semblance of characters is 9 inches in length, followed, after a small break, by what can only be described as a simple form of decoration, consisting of two rows of figures, which, when complete, resemble repeated Bs or Ds (Figs.

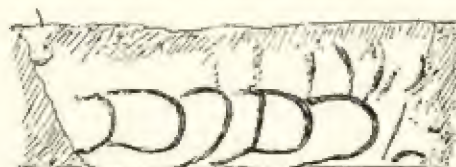


FIG. 739. SECTION OF RIM OF ASINÉ JAR SHOWING SIMPLE CURVED DECORATION.


739, 740 B-B). A fairly exact idea of the only part on which it seems possible to detect definite signs may be gathered from

my copy, reproduced, with one-third reduction, in Fig. 740. The notes below this give my own conclusions as to its contents.


The initial part, A-A, as shown, is quite indeterminate, and does not






FIG. 740. SECTION OF RIM OF ASINÉ JAR SHOWING VARIOUS FIGURES, SOME REFLECTING SIGNS OF SCRIPT B. (FROM SKETCH BY A. E.)

suggest any known sign of writing, while B-B seems to me to be a repetition of the same decorative *motif* that appears on the rim farther on (see Fig. 739). c, however, might fairly be regarded as a reminiscence of the well-known 'wheel' sign  and d, which closely follows it, seems to be

Signs of Minoan Script turned to decorative use on Asiné jar.

based on the 'whip' of the later Palace script . There follows what seems to be a very rude sketch of a bull (E-E), and the 'ivy-leaf' sign may well have supplied the elements of F-F, where two similar characters run into one another. The last figure on the right (G) must certainly be recognized a misshapen double-axe symbol,¹ with traces of the foliate stem with which, as at Hagia Triada, it was associated in its ritual form. On a votive vessel from a shrine perpetuating the traditional cult its appearance is quite natural.

The apparent imitation of the signs , , and —the last two forms peculiar to Class B—is itself of considerable interest. It is to be observed, moreover, that, as shown above in the Table, Fig. 728, all three signs are exemplified by the later Mainland version of the Cretan Class B. It seems probable that the Asinê potter—though himself illiterate—had before him some existing document of the old script, the signs of which he may have used as decorative models, much as medieval Sicilian craftsmen adapted the Cufic characters. There may also have existed some vague feeling of their having a religious value. But, for that very reason, he can hardly himself be credited with a knowledge of the Art of Writing.


Beyond this it is impossible to go: the graffiti signs cut on the rim of the Asinê jar cannot be regarded as forming an intelligible inscription.²

The Minoan Script in Cyprus.

Late
Minoan
Script
intro-
duced
into
Cyprus.

The more or less continuous Minoan contact with Cyprus has been shown to go back to the time of the finest L. M. I *b* artistic phase, such as is reflected on the 'marine style' relief of the bronze 'hydria' from Kurion.³ Some acquaintance with Script A—so widely diffused in Crete itself—might therefore well be looked for there, and, indeed, is traceable in at least one of the 'Cypro-Minoan' characters still current during the vogue of the insular style answering to L. M. III *b*.

In number, the published examples are very limited⁴ and are, indeed,

¹ Prof. Persson, *op. cit.*, p. 17, has rightly recognized this, and the sprays on either side of the shaft (by him connected) corroborate the conclusion. The double-axe, however, had already given birth to the character  in the linear script of Crete, though it was at times used as a symbol.

² I am wholly unable to follow Professor Persson in his bold attempt (*op. cit.*, p. 10 seqq.) to read off the marks on the jar in

signs of the later Cypriote syllabary, though I am in agreement with him on the general question of the indebtedness of that syllabary to the advanced Minoan linear Script (see my Table, *Scripta Minoa*, i, p. 79, and the revised version of it, p. 762 below). But many of the suggestions made in his Table, *op. cit.*, Fig. 6, p. 17, miss or overshoot the mark.

³ See *P. of M.*, II, Pt. ii, p. 653 and Fig. 418.

⁴ See my *Scripta Minoa*, i, p. 30 seqq.

confined to inscriptions on clay balls from Enkomi, or Old Salamis¹ (Figs. 742, 743), an engraved gold ring from Maroni,² a Cypro-Minoan cylinder in the Louvre,³ and another in the Cesnola Collection.⁴ To these may now be added

On cylinders, clay balls, and rings.

a limestone fragment, from a looted tomb of the same site, with graffito characters (Fig. 741). The latter is due to Professor

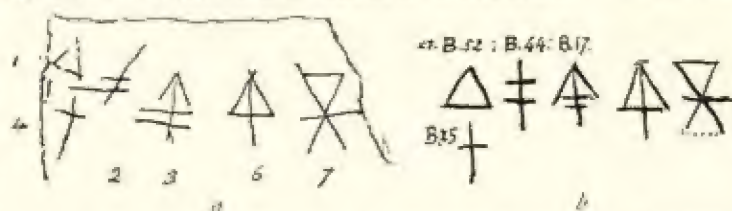


FIG. 741. a, INSCRIPTION ON LIMESTONE FRAGMENT, ENKOMI TOMB. b, IDENTIFICATION WITH MINOAN SIGNS.

Myres's more recent excavations, and a photograph of it was kindly put at my disposal by him.⁵

From my tracing of this, Fig. 741, a, it will be seen that the first four characters form a group (the last of them placed below) that closely corresponds with the four signs of the late Palace signary (B) of Knossos given here for comparison in Fig. 741, b.⁶ The other two answer to two religious symbols. The first (No. 6) has been here called the 'impaled triangle' constantly recurring on the later seal-stones,⁷ which also serves in a secondary shape as a common ideographic sign of Class B before numbers. Considering the hastiness of these *graffiti*, it seems not unreasonable to recognize in No. 7 an incomplete Double Axe.

Graffito on Sherd.

The fragment is broken off at the beginning of the inscription. There seems to be, moreover, slight remains of another sign before No. 4. Nos. 1, 2, and 3 may therefore be the end of a group of four, or perhaps five, characters, and 4 of another, perhaps of two or three signs. Nos. 3 and 4 may be looked on as terminals, and this fact is of some interest since both 3, the 'arrow', and the 'cross', 4, are among the commonest and most

¹ *B.M. Excav. in Cyprus*, p. 27, Figs. 58-60, found close to one of the tombs.

² From a tomb excavated on the Tekke site near Larnaka by Mr. H. B. Walters. See A. E., *Mycenaean Cyprus*, &c. *Journ. Anthr. Inst.*, vol. xxx, p. 109. So far as my information goes the only associated objects were Late Minoan. Prof. Dussaud, however, regards the ring as of later date.

³ R. Dussaud, *Les Civilisations préhelléniques*, p. 431, Fig. 320.

⁴ Ward, *Seal Cylinders of Western Asia*, No. 1164.

⁵ See J. L. Myres, *Man*, February 1934. The tomb was situated on the limestone escarpment above the Minoan Akropolis of Enkomi. My reading of the inscription is also given, *loc. cit.*

⁶ A very slight, almost vertical abrasion, had effaced the upper angle of the triangular sign (No. 1), and a corresponding small section of its base, but there can be little doubt of its completion as shown in Fig. 741 b.

⁷ See above, p. 581, Fig. 568, and cf. p. 725.

distinctive terminals of the groups identified above as representing men's names on the Knossos tablets of Class B.¹

Inscribed
clay-
balls.

Turning to the clay-balls, five in number,² the incisions on which (Fig. 742 and Fig. 743, *a-e*) at times recall cuneiform methods, it is clear



FIG. 742. CASTS OF INSCRIPTIONS ON CLAY-BALLS, ENKOMI, CYPRUS.

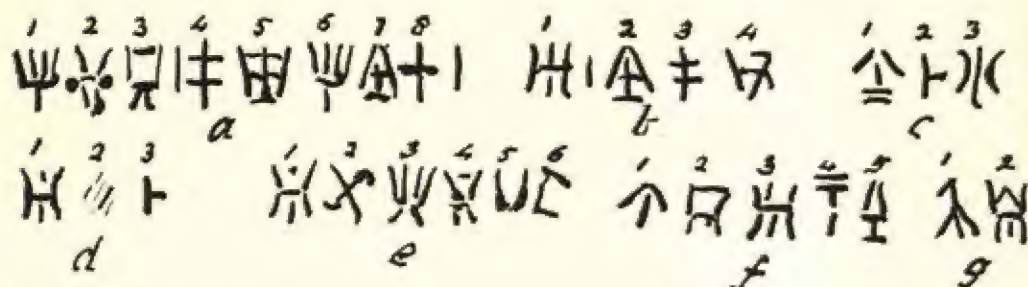


FIG. 743. COPIES OF CYPRO-MINOAN INSCRIPTIONS. *a-e*, ON CLAY-BALLS; *f, g*, CYLINDERS.

that, out of the twelve different characters fairly well defined, nine may be identified with signs of the Cretan Linear Script (see Table, Fig. 744). To these the gold signet-ring adds three more, including the *ankh* sign, common to both Script A and B. Together with those on the limestone fragments (three of which duplicate the others), we have thus in all 15 Cypro-Minoan signs that are paralleled by the advanced linear forms of Crete.

It is noteworthy that while the terminal sign on the ring (No. 9 of the Table) and the special form in which the 'cup' appears (No. 4) point to

¹ See above, p. 714.

² Three only of these were reproduced by transcriptions in *B.M. Excav. &c.*, p. 27, Figs. 58, 59, and 60 (upside down). Photographic facsimiles of casts were kindly supplied by the British Museum. See, too, Professor

Persson in his paper on *Some Inscribed Terra-cotta Balls from Enkomi*. He regards them as weights, but Minoan, Syrian, and Egyptian weights all have a flat surface below to keep them in position. These objects, indeed, have no single characteristic of weights.

Class A, one of the best defined characters that is here found, No. 1, is peculiar to B. Nos. 3 and 9 also best answer to that, and the 'impaled triangle' as a symbol is also connected with the inscriptions and seal-types of the late palatial epoch at Knossos.

No. 15 of the Table (cf. Fig. 743, *a*) is unmistakably a degenerate version of a facing ox-head, which in Crete is common on the hieroglyphic seal-stones and sealings.¹ In the corresponding sign of Class B (where the fore-legs are added), it appears in the middle of groups, as a phonogram.

The clay-balls themselves may most naturally be compared with the small round clay nodules found in the votive sanctuaries of Crete—as at Petsofa and the Peak Sanctuary of Juktas,² where was the traditional Tomb of the Cretan Zeus. In connexion with the first discovery they were aptly compared by Professor Myres³ with the 'pebbles, pellets, and missiles of various kinds' thrown 'either into bonfires or into sacred places or at a cult object', and in particular the Buddhist prayer pellets containing a written prayer or petition thrown or spat at a cult image. In Minoan Crete the name of the votary was inscribed on certain offertory relics such as the small clay image from Tyliossos or the bronze votive tablet from the Psychro Cave.⁴ It seems likely, therefore, that the inscriptions on the Cypriote clay-balls served the same votive purpose, or at least supplied a medium for placing the votary in the hands of the divinity. The 'cross' sign at the end of Fig. 743, *a*, is a constantly recurring terminal of male names on the Knossos B tablets, often succeeded by the 'man' sign.

Clay-balls
of Minoan
Shrine.

The comparisons with characters of the advanced linear script of Crete carry with them in several cases resemblances to signs of the Greek Mainland Script.⁵ On the other hand, not a single sign peculiar to the Mainland group can be said to find any similar form in the Cypriote series. In face of this the idea of the introduction of the Cypro-Minoan script from the 'Mycenaean' side seems to be less probable.

Compari-
sons with
Linear
Script B.

Parallels, some of which are too detailed to be accidental, are also here given with signs of the Cypriote Greek Syllabary that first emerges into view some four or five centuries later than the objects with which we are dealing. The old syllabic script had been by that time very imperfectly adapted as a vehicle for Greek writing, in an Age when, outside this conservative Island, the Semitic Alphabet had been generally adopted. This

Parallels
with signs
of Cypri-
ote Greek
syllabary.

¹ See *Scripta Minoa*, i, p. 206, No. 62.

² *P. of M.*, i, p. 159.

³ *The Sanctuary Site of Petsofa* (*B.S.A.*, ix), p. 382 and Pl. XIII, 66.

⁴ See *P. of M.*, i, pp. 632, 633, Figs. 470, 471, and p. 634, Fig. 472.

⁵ E.g., Nos. 2, 3, 5, 6, 7, 8, 12.

CRETAN LINEAR SCRIPT A AND B	CYPRO-MINOAN SIGN	LATER CYPRIOTE SYLLABARY
1) (B) (B) : (B)	1)	VA) (E) :
A A B	2) ^{JAR}	SI KA
B A	3)	PA TI
A A	4)	
A A A B	5)	KE
A B	6) ^{JAR}	LO
A B A	7) ^e	E
A B	8) ^{CYL. LOUVRE}	
A B	9) ^d	TA
A B A	10) ^{CYL. WARD 1164}	NA
A A A	11) ^{CYL. WITH}	KO
A B	12) ^R	RA ^{COLGOS}
A B ^[WITH N° 52]	13) ^{JAR}	YA
A A B	14) ^e	<div> MINOAN RELIGIOUS SYMBOL NUMERICAL SIGN OF B </div>
A B ^{CE. HIERO GLYPH. 69}	15)	

FIG. 744. CYPRO-MINOAN SIGNS COMPARED WITH CRETAN.

persistence, beside the very cradle of the Alphabet, of the more imperfect local tradition is itself one of the strangest phenomena in the History of Writing. The sounds of the characters so far as the Greeks could find an equivalent are, however, given.

With these rests the only real hope of even approximately learning the values of the Minoan signs.

It will be seen that, among the comparatively small number of signs selected in the Table, Fig. 744, for their equivalence with those of the Minoan signary, nine at least are practically identical with the later Cypriote *e* or *va*, *si*, *pa*, *lo*, *e*, *ta*, *na*, *ko*, and *ra*. Naturally, if the much larger material supplied by the whole Minoan signary is drawn on for such comparisons, the amount of conformity visible becomes considerably larger.

It will still be found, however, that there remains a by no means negligible residuum of signs that have no obvious connexion with Minoan forms. It must always, indeed, be borne in mind that Cyprus itself had its independent tradition of early script, going back centuries before the date of the Minoan plantations on that side.

Residuum of unknown elements in Cypriote scripts.

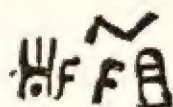


FIG. 745. INSCRIPTION ON EARLY STEATITE CYLINDER: PARASKEVI, CYPRUS.

Although little, as yet, is known of this, a single cylinder of green steatite from a Copper Age tomb of the Hagia Paraskevi Cemetery,¹ the inscription on which is given in Fig. 745, would be sufficient to demonstrate the existence of early linear signs parallel with that

Traces of an earlier Cypriote linear class on Copper Age cylinders

which already existed in Crete long before the days of the more advanced scripts A and B.² Some curious parallels presented by this early cylinder group—small as it is—tend to show that this primitive class of linear signs had a certain family relationship to that of Early Minoan Crete.

Minoan Contact with opposite Cilician Coast: How far did the 'Men of Keftiu' introduce their Script?

A good deal of evidence tends to show that the early population of Cyprus was closely akin to that of the neighbouring coastland of Asia Minor, while the affinities of the latter, and notably of the early inhabitants of Cilicia with a dominant section of the Minoan Cretans, is illustrated at every turn by the practical identity of local and personal names,³ as well as by the proto-Armenoid character of the portrait of the early Priest-king of Knossos, as seen on seal impressions.

Minoan contact with opposite Cilician Coast.

When, apparently towards the beginning of the Fifteenth Century B.C., the Minoan Cretans were planting commercial settlements both in Cyprus and the opposite Mainland strip (which best answers to the original 'land of Keftiu'), the process of penetration was doubtless in both cases aided by the old underlying community of race.

To what extent the 'Men of Keftiu' on the Cilician side introduced there, as in Cyprus, their improved methods of writing, can only be ascertained by future discoveries. Of the existence of an independent L. M. III culture in that region we have already some certain indications in the sherds described above. But the evidence is accumulating on the Mainland side of Hither Asia—Anatolian, as well as Syrian—not only of the diffusion of

Independent L. M. III branch in that region.

¹ In the Ashmolean Museum: Sayce Coll.

² The 'N' sign above occurs among the 'primitive linear' signs of Crete, parallel with the Hieroglyphic. The 'F' repeated is common to class A. The terminal sign corresponds

with a pictograph identified on the tablets of the Linear Class B at Knossos with a kind of granary, see above, pp. 622 and 623.

³ See, for instance, above, p. 751, and *P. of M.*, i, pp. 6, 7.

the actual originals of the handiwork of the 'Men of Keftiu', but of their imitation by native craftsmen.

Indications of Minoan Contact with Pontic Region: Direct Ceramic Influence and a Graffito from Amisos (Samsoun).

Indications of Minoan contact with Pontic regions.

Two-stalked L. M. I δ motive on vases from Old Samsoun (Amisos).

It is true that in the case of certain animal 'rhytons', like those in the shape of bull's heads adopted by the Minoan Cult, the ultimate source can be traced back both on the Cretan and the Anatolian side to old Sumerian prototypes.¹ The large group of 'Cappadocian' theriomorphic vessels had doubtless a very early inspiration from the lands farther East. But a class of these that seems in a special way to connect itself with the old Hittite Capital on the site of Boghaz-Keui (Pteria) and its maritime outlet at Eski Samsoun (Amisos) on the Pontic side, stands in a direct relation to Minoan models. It has been already noted that the 'sacral ivy leaf' motive, prominent in certain forms, bears clear evidence of a Minoan reaction.² For this decorative motive—in which a purely geometrical conjunction of two rows of running spirals is combined with a spray that reflected the hieratic papyrus-wand of Egypt—had had, as we have seen, a long antecedent history in Crete. There the exotic spray had transformed itself betimes into a natural ivy leaf, with the double stalks imposed by its origin, and often, within the leaf itself, the curved surviving outline of the papyrus tuft (Fig. 746, *b-e*). At times the naturalistic transformation is complete and we see an ivy leaf on a single stalk.³

A typical example of the two-stalked ivy is given in Fig. 746, *f*, from an 'L. M. I δ amphora'.⁴ When, then, this Minoan derivative form—otherwise presenting the usual type of 'Cappadocian' polychromy⁵ with simple geometrical motives—appears on a series of bulls' head 'rhytons' of the

¹ For the prototypes of the Minoan tauriform Class, see *P. of M.*, ii, Pt. I, p. 259 seqq.

² See *P. of M.*, ii, Pt. II, pp. 658, 659 and Fig. 422.

³ The ivy-leaf pattern also occurs on a sherd belonging to some larger vessel from Chirishli Tepe, S. of Boghaz-Keui (Sayce Coll.: Ashmolean Museum: Evelyn White), see Fig. 747 *b*.

⁴ Kakovatos series: *op. cit.*, p. 485, Fig. 291c.

⁵ For this ceramic class, which in its later phase at least, might appropriately be called Hittite, see Frankfort, *Studies in Early Pottery of the Near East*, ii, p. 156 seqq., and cf. J. L. Myres on 'Cappadocian' Ware (*Journ. R. Anthr. Inst.*, 1903), p. 304 seqq. Fine

coloured illustrations of this class of pottery, based on the Louvre Collection, have now been given by Mons. H. de Genouillac in his *Céramique Cappadoicienne*. The Ashmolean Museum has also lately obtained an exceptionally good group found some years back in a tomb at Old Samsoun (Amisos) (in *Report of the Visitors*, 1933, p. 9 and Pl. II). M. Genouillac, misled, no doubt, by the striking resemblance both of the bull's head 'rhyton' form and of the ivy spray decoration (though there with single stalks) to late Italo-Greek examples, had brought down the Cappadocian group to the Hellenistic Age. (See *P. of M.*, ii, Pt. II, p. 658, note 4.)

Samsoun group (see Fig. 747), it is impossible not to recognize an intrusive Minoan element. It may be also noted that the bulls' heads themselves of



FIG. 746. COMPARATIVE EXAMPLES ILLUSTRATING EVOLUTION OF 'SACRAL IVY' MOTIVE, WITH DOUBLE STALKS.

this series are much better moulded than, for instance, a late Hittite 'rhyton' from Ain-Tab.¹ and fit in with the naturalistic tradition visible in faïence specimens in the form of rams' and horses' head-cups from Enkomi.²

The chronological basis supplied by the Minoan stage of the ivy-leaf spray L. M. I b—roughly the first half of the Fifteenth Century B.C. and contemporary with Thothmes III's reign—answers to the great days of the Hittite Empire. The port of Amisos—Old Samsoun—was at the same time the nearest maritime outlet of its great inland capital, the later Pteria (Boghaz-Keui). The shortest alternative route to the Mediterranean³—almost twice

¹ A. E., *Archaeologia*, lxy, p. 94, Fig. 97: in the Ashmolean Museum.

² For the faïence vessels from Enkomi see *B. M. Excav. Cyprus*, Pl. III, and cf. H. R. Hall, *The Civilisation of Greece in the Bronze*

Age, pp. 224, 225 (Fig. 295, horse's head; Fig. 296, ram's head).

³ For the old routes leading North and South from Boghaz-Keui to the sea, see especially Sir William Ramsay, *The Historical*

the length of the other—was compelled, in order to reach what is now the port of Mersina, to pass through the narrow defiles of the 'Cilician Gates'. There



FIG. 747. *a*, PAINTED BULL'S HEAD 'RHYTON' FROM ESKI SAMSOUN (AMISOS) SHOWING MINOAN 'SACRAL IVY' AND 'OATS' MOTIVE COUPLED WITH GEOMETRIC 'CAPPADOCIAN' ELEMENTS. *b*, FRAGMENT FROM CHIRISHLI TEPE.

the rocky walls were said to have approached so close that—till Ibrahim Pasha blasted them for the passage of his artillery—'a camel could hardly pass through with his load'.¹ It is not unreasonable then to suppose that, over and above the natural point of contact on the Cilician side, the seafaring enterprise of the Minoans might have also sought the Pontic outlet of Kheta-land.

Of very early Aegean relations with the Pontic coasts we have more than one indication, and something has been already said of the important part played by the old Troadic silver trade.² The 'sources' of silver were indeed carried still farther afield on that side to the upper system of the

Geography of Asia Minor (R.G.S. Suppl. Papers, iv), pp. 28, 29, &c.

¹ Ramsay, *op. cit.*, p. 51.

² Notably the diffusion of the silver 'kantharos' type (see *P. of M.*, i, pp. 191-3).

Halys,¹ that once ringed round the very centre of the old Hittite power. There, near Yuzgat, amid the White Mountains, rich silver mines have been still worked in modern times.²

The figure of the Minotaur on the earliest coinage of Colchis may give some warrant for supposing that Minoan commercial activities had extended still farther East on the Caucasian side.³

The bright red paint which relieves the white slip of the Amisos vases, as well as those of Boghaz-Keui, certainly suggests that Pontic region from which the Greeks obtained later, through the more Western port, the famous 'Sinopic Earth'. It may be further said that the artistic adoption of the 'two-stalked ivy' pattern on what we must regard as a North Hittite class of ware is of such a kind as to suggest Minoan handiwork on the spot rather than semi-barbaric adaptation of a pattern on foreign articles of import. The contrast between the naturalistic plant decoration here seen and the coarse geometrical pattern, of Cappadocian tradition, visible on the other parts of the 'rhyton' is so great that we may fairly recognize a Minoan hand.

Evidence
of Minoan
handi-
work.

It is possible, indeed, to carry the comparison still farther. The plant



FIG. 748. PART OF JUG DEPICTING CEREAL, IDENTIFIED WITH OATS: KNOSSOS.

decoration in the zone beneath that depicting the two-stalked ivy displays, in fact, both in style and details, an unmistakable resemblance to the cereal type seen on the Knossian Palace jug described above⁴ and here reproduced in Fig. 748.

The identification, there suggested, with oats will hardly be contested, and

Ears of
barley.

both this and the other jugs showing ears of barley—in that case in relief—may also have reference to some kind of brew. We may assume the same about the Samsoun 'rhyton'.

¹ The Halyzonian allies of Troy in *Il.* ii. 857, are brought *τηλόθεν ἐξ Ἀλέβης, ὅθεν ἀργύρον ἐστὶ γαιέθλην*. The names of both Halyzones and Halybê (like that of the *Χάλυβες*) reflect that of the river.

² This information is due to Prof. R. M.

Dawkins. Numbers of Pontic Greeks were at one time transferred to work the Ak Dagh mines.

³ Mr. Charles Seltman at Cambridge kindly reminded me of this type.

⁴ See above, p. 629 and Fig. 620, *a*, *b*.

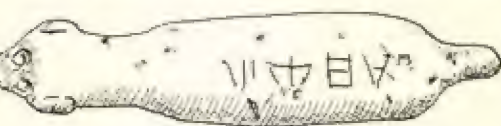
Votive
clay ram
from
Amisos
with Mi-
noan
graffito
inscrip-
tion of
linear
Class A.

That direct Minoan contact with the Hittite world had in fact been actually established on the site of Amisos may be taken to be established by the occurrence there of a curious inscribed relic. Some years since Professor Sayce obtained from Eski Samsoun what appears to be a small figure of a votive class, commonly associated with Minoan sanctuaries, representing a ram, or horned sheep.¹ It was formed of coarse clay, containing numerous minute pebbles (Fig. 749, *a, b*), and showed on its back and side two lines of graffito signs.² The object has since passed, by his will, with the rest of his Collections, into the possession of the Ashmolean Museum, and a careful examination of the graffiti has assured me that the bulk of the signs represent recognizable form of the Minoan linear Class A.³ Of its belonging to any of the other available scripts used in ancient Anatolia, such as Hittite, Phoenician, Greek or the Lykian or kindred alphabets, there is no question.

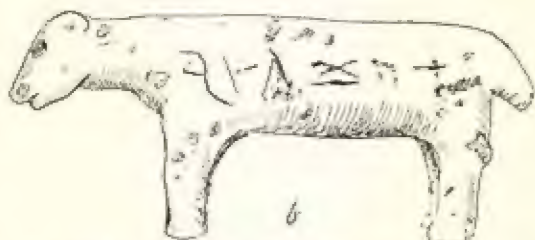
The comparisons given in Fig. 750 of the graffito signs on the votive ram with typical forms of the Minoan linear Class A will be probably regarded as conclusive. The 'cup' sign (2) and the 'yod'-like figure of the forearm and hand (6) show slight variations in detail, and one or two signs, perhaps ideograms—as notably No. 8—are not accounted for. But the general correspondence is unmistakable. We seem to have here an offshoot of this type of script in use amongst the Minoan traders—some of them perhaps actual settlers—at the ancient Amisos.

¹ The object is 13 cm. (4½ in.) long and 4.1 cm. (1⅔ in.) high.

² An O-like incision appears on the lower part of the animal's body (Fig. 749 *c*).



a



b

FIG. 749 *a, b*. VOTIVE CLAY RAM FROM SAMSOON WITH GRAFFITO INSCRIPTION ANSWERING TO LINEAR SCRIPT B OF KNOSSOS. (½)

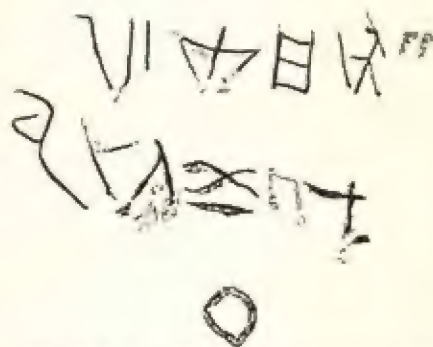


FIG. 749 *c*. GRAFFITO INSCRIPTION ON VOTIVE FIGURE (THE O-LIKE SIGN BE- NEATH BODY). (½)

³ Obviously the votive figure had been acquired by Professor Sayce in pre-Minoan days. In his MS. description it appears as a 'graffito inscription in an unknown script'.

One archaic feature is noteworthy, so far as Minoan practice is concerned. The inscription is written *boustrophêdon* fashion. The known direction of the 'cup' in what seems to be the first sign-group indicates that the line runs from right to left, while Minoan usage with regard to Nos. 6 and 7

Written
boustrophêdon
in Hittite
fashion.

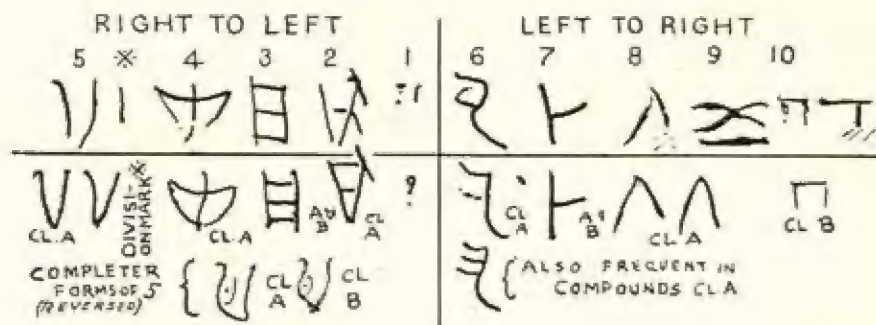


FIG. 750. ANALYSIS OF INSCRIPTION SHOWING ITS BOUSTROPHÊDON ARRANGEMENT. COMPARISONS PRESENTING SIGNS OF CLASS A.

points to the second line running from left to right. But this divergence from the modern method, consistently observed in documents of both the advanced linear classes in Crete, of reading from left to right only is of considerable significance in relation to the region in which the graffito itself was found. The practice of the *boustrophêdon* method of writing first from right to left and then from left to right was one of the earliest features noted with regard to the Hittite writing.¹ We may here then recognize not so much a remote reminiscence of early examples of the Cretan hieroglyphic writing, as an attempt to conform with local Hittite usage.

Again we are confronted with a singular parallelism in the epigraphic and ceramic history, just as we have seen the diffusion of Class B in Mainland Greece proceed *pari passu* with the appearance of a new style of painted pottery also largely dependent on the palatial traditions of Knossos. A like simultaneous reaction is demonstrated above in the case of Cyprus, and some new and interesting revelations of Minoan activities on the North Syrian Coast, summarized in the next Section, repeat the same story.

¹ See, for instance, W. Wright, *The Empire of the Hittites*, p. 138, &c. Sayce in his account, there quoted, of the 'Pseudo-Sesostris' of Karabel (*op. cit.*, p. 169), observes that the 'boustrophêdon' manner of writing distinguishes all the known Hittite inscriptions. A clay tablet from Toprakkaleh, on the Arme-

nian side, which in its form and incised horizontal lines resembles Class B, bears an inscription running 1. to 1. (Lehmann-Haupt, *Armenien, &c.*, ii, pp. 583-9, and Fig.). Its seventh-century date, signs, and numeration prove it to be un-Minoan.

§ 113. SUPPLEMENTARY TO PRECEDING: THE MINOAN REMAINS AT RAS-SHAMRA: CORBELLED VAULTS WITH BLIND OPENINGS AS ROYAL TOMB OF ISOPATA, AND VOTIVE SILVER BOWL WITH INSCRIPTION OF CLASS B.

Evidences of Minoan trade and settlement at Minet-el-Beida and Ras-Shamra—Professor Schaeffer's discoveries; Opposite Cyprian Salamis; Link with Euphrates and station of faience import; Persistent traditions of Minoan settlement in North Syria; 'King Kasios'; Cuneiform Alphabet of local evolution; Built 'Royal Tombs' with corbelled vaults identical in structure and details with Royal Tomb of Isopata; Openings in masonry connected with blind wells for drink-offerings; Features in Isopata Tomb explained—blind openings backed by virgin soil; Further parallel supplied by smaller built tomb at Isopata; Minoan types of vessel associated with Ras-Shamra Tombs; Mouthpiece of faience 'rhyton' from Assur of L. M. I a fabric; Votive silver bowl from Ras-Shamra deposit presenting graffito inscription of Class B.

On the Syrian side, almost directly East of the point of the long projecting horn of Cyprus, the discoveries—epoch-making in more than one direction—of Professor Claude F. A. Schaeffer and his collaborators of the French Mission have brought to light what seems to be something more than a merely commercial plantation from Late Minoan Crete.

Evi-
dences of
Minoan
plantation
at Minet-
el-Beida
and Ras-
Shamra.

Here opens the little, almost land-locked cove, still called, as in Classical times,¹ the White Haven—Minet-el-Beida—from its low chalk cliffs and rocks, while, a little inland, rises the 'Tell' of Ras-Shamra—'Fennel Hill'—the site of an ancient acropolis, the relations of which with Egypt, attested by local monuments, go back well into the Middle Empire. The fact that the great Cypriote emporium of Salamis (Enkomi) lay directly opposite accounts for the early preponderance of imports from that side, and there seems to have been some actual mercantile settlement. But what specially concerns our present subject is the remarkable evidence that has resulted from these excavations of intimate contact with the new Minoan lords of Cyprus, and the conclusive proof that they had actually obtained a footing in this Syrian haven.

The fact itself has great importance in its general bearing on the diffusion of Minoan influence by the easy route of transit thence along the

¹ Λευκὸς Λιμὴν.

Nahr-el-Kebir to Aleppo and Mesopotamia or to Hama and Homs,¹ and it was, doubtless, in this way that specimens of the fine fabrics of faience and *porcelaine tendre*, equally well represented in the richest tombs of Salamis and of Minet-el-Beida,² penetrated to the Euphrates. The most characteristic of these, the goblets presenting what may best be regarded as the Goddess's face with Hathoric head-piece, were, in fact, found in the early Ishtar Temple at Assur.³

Opposite Cyprian Salamis and link with Euphrates: station of Cypro-Minoan faience trade.

Structural Identity of the Corbelled Tombs of Minet-el-Beida and Ras-Shamra with the Royal Tomb of Isopata and Allied Cretan Group.

The tombs containing Minoan relics brought to light at Minet-el-Beida and by the Library site on the neighbouring akropolis of Ras-Shamra afford, not only in their general structure, but in the characteristic details connected with them, direct and surprising evidence of a connexion with Knossos itself. They throw, indeed, a retrospective light on certain details in the construction of the Royal Tomb at Isopata⁴ that had not hitherto been explained.

The general architectural resemblance presented by the Ras-Shamra group, with their keeled vaults, to the Isopata Tomb in its original aspect was recognized by their excavator.⁵ There, too, we see, on a somewhat lesser scale, rectangular built chambers approached by a descending *dromos*, with high corbelled vaults more or less 'lanceolate' in section. But a remarkable feature in their structure carries this general resemblance to

Structural form and details of Ras-Shamra Tombs identical with those of Royal Tomb at Isopata.

Openings in masonry connected

¹ See Professor Dussaud's comprehensive survey, *Syria*, x, p. 21.

² For Tomb VI, see Professor Claude F.-A. Schaeffer, *Syria*, xiv (1933), Pt. II, p. 105 seqq. and Plates XI, XII.

³ It does not find a place in Andrae, *Archaische Ishtar-Tempel in Assur*, or in *Farbige Keramik aus Assur* (1923). See, however, H. R. Hall (*J. H. S.*, xlviii, 1928), p. 64 seqq., who makes good the Cypro-Minoan claim to be the source of the 'woman-head cups'. Those of Assur, which might be regarded as rather degenerate copies of the best of Enkomi and Ras-Shamra, are from the Ishtar temple, reputed to date from the time of Tukulti-Enurta I (c. 1260-1238 B.C.).

⁴ For the Isopata Tomb see A. E., *The Pre-*

historic Tombs of Knossos, I, Quaritch, 1906 (*Archæologia*, lix), p. 136 seqq.

⁵ Claude F.-A. Schaeffer, *Fouilles de Minet-el-Beida et de Ras-Shamra* (1929), *Syria*, x, p. 291, n. 2. So far as corbelled keel vaulting goes, attention has also been drawn by Dr. Einar Gjerstad (*Summary of Swedish Excavations in Cyprus, Syria*, x, see p. 65), to the structure of the great tomb, with *dromos* and descending staircase, at Trahanas. Built tombs of oblong form with the upper part of the side walls corbelled and roofed by large slabs were found at Enkomi (*B.M. Excav.*, &c., p. 5, Fig. 5). The evidence, however, of the characteristic 'blind openings' and 'blind wells' does not seem as yet to be forthcoming in Cyprus.

with blind
wells for
drink-
offerings.

such a measure of conformity in actual detail as to afford convincing evidence of the Cretan origin of this type of vault. This feature—not before noted in built sepulchral chambers—is the more or less square opening in the masonry, the connexion of which with blind wells for drink-offerings to the thirsty dead is in some cases clearly established.



FIG. 751. N.W. CORNER OF SEPULCHRAL CHAMBER (TOMB VI) AT RAS SHAMRA.

The dimensions of the largest of these sepulchral vaults—to which Monsieur Schaeffer has not hesitated to attach the name of 'Royal Tombs'—were 6.50 metres, by 3.50 in width, comparing, respectively, with 7.85 and 6.05 metres at Isopata. The Sixth, the largest of this group of tombs, was also the richest, containing, amongst other precious relics, a goblet and mask of faience in the form of female heads and rivalling the finds of Enkomi and Assur. In the sepulchral chamber of Tomb V an opening in the masonry

of the left wall gave access to a jar to receive and hold the libations that reached it from above by means of a shaft.

The best preserved example of the structure was presented by another vault, only second to the last in dimensions, which rose beside the Library on the Tell itself. The illustration here (Fig. 751) shows a window-like opening on the arched side and another in the back wall, opposite the entrance, while a further opening on the ground level, to the left of the entrance, led to a kind of *Cella*, adapted to hold the overflow of liquid offerings.

Blind Openings and Corbelled Vault of 'Royal Tomb' at Isopata paralleled at Ras-Shamra.

But the methods of securing the passage of drink-offerings to the interior of the vault, illustrated by the Ras-Shamra group, at once explain a feature in the Isopata tomb that had hitherto remained enigmatic.

Here again, opposite the entrance to the burial vault, a low door-like

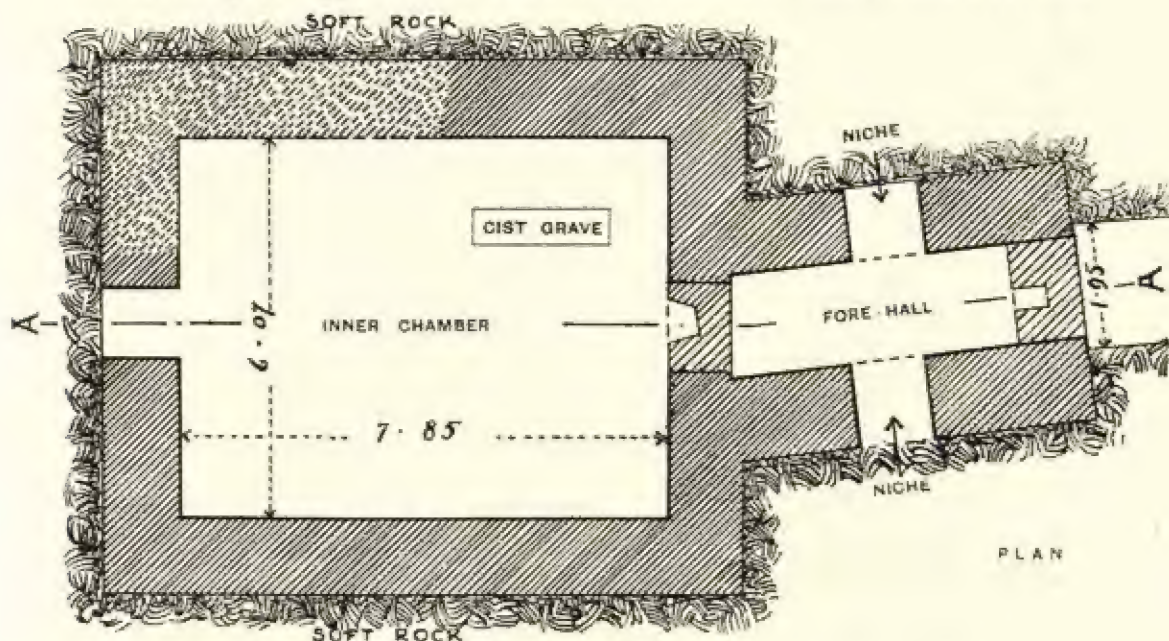


FIG. 752. PLAN OF INNER CHAMBER AND FORE HALL OF ROYAL TOMB OF ISOPATA, NEAR KNOSSOS. THE MAIN CHAMBER SHOWS AN OPENING IN THE MASONRY BACKED BY THE VIRGIN ROCK AND THE FORE HALL TWO OTHERS OF THE SAME CLASS.

opening was visible in the masonry securing direct contact with what in that case consisted of the soft 'kouskouras' rock that had been cut into for the construction of the sepulchral chamber (see Plan, Fig. 752). May not this, too, have stood in relation to some superficial blind well above, devised for the passage of libations? These might well be thought to have trickled through into the abode of the dead.

Features in Royal Tomb of Isopata explained. Blind openings on virgin soil.

This arrangement, moreover, further explains the openings in the masonry of the side walls of the Fore Hall of the tomb, in this case forming corbelled arches ending blindly, like the low 'doorway' of the inner chamber, against the virgin soil. These lateral recesses were later used for a series

of interments, the remains of which were found, accompanied by late L. M. III pottery. The Royal Tomb itself dated from the L. M. II



FIG. 753. INTERIOR OF ROYAL TOMB OF ISOPATA, NEAR KNOSSOS, SHOWING LOW OPENING IN ENTRANCE BLOCKING AND LATERAL ARCHWAY IN WALL OF FORE HALL BEYOND, ENDING, BLINDLY, AGAINST VIRGIN SOIL.

Period—contemporary with the earlier elements of the Minet-el-Beida series, and contained vases of the finest 'Palace style'.

It seems probable that there had originally existed some channels for conducting such drink-offerings as may have filtered into these recesses into the Cist grave visible just within the doorway of the inner chamber. Openings in entrance blocking and fore hall.

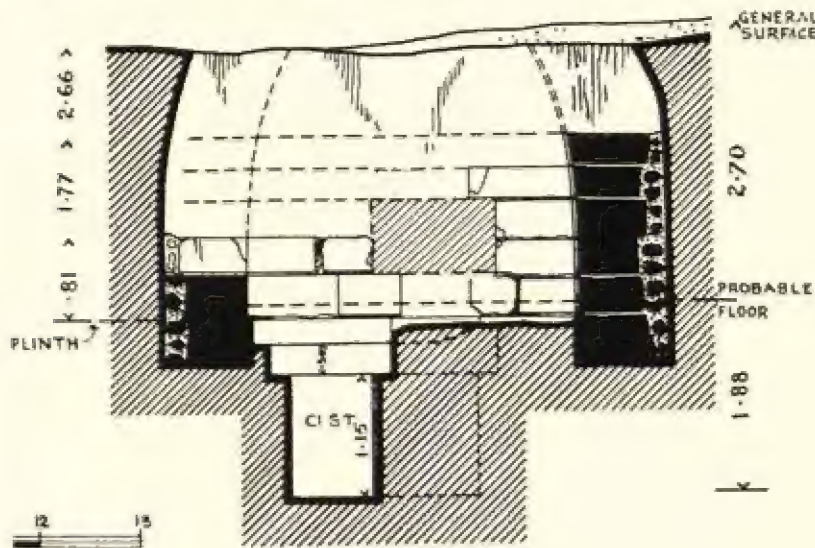


FIG. 754. SMALLER BUILT SEPULCHRAL CHAMBER, Tomb I, at ISOPATA, with OPENING IN BACK WALL.

A low door-like opening was in fact visible in the masonry of the entrance blocking, exactly opposite the similar opening in the Western inner wall of the great vault. In Fig. 753 a good idea is given of this low 'doorway' and of the lateral arch in the Fore Hall of the Isopata Tomb beyond—a blind entrance, again, to Mother Earth. This view also illustrates the general structure, so closely recalling the Ras-Shamra vault, Fig. 751.

In the smaller neighbouring tomb, No. 1 of the Isopata Cemetery, identical in its method of construction—with keel-shaped vault and the front and back walls upright—a similar opening occurred in the inner masonry, opposite the entrance (see Fig. 754). In this case it was made one course above the floor-level, being thus suggestive of a low window rather than a door. The resemblance between this tomb and one at Minet-el-Beida provided with a similar aperture in the back wall is so striking that the representation of the latter given in Fig. 755¹ might almost serve as an illustration of the Knossian vault!

The smaller built tomb at Isopata contained fragments of vases in the

¹ From a photograph kindly supplied me by Prof. Schaeffer.

Further
parallel
supplied
by
Tomb I,
Isopata.

Palace style, a fine gold-mounted intaglio, and the gold signet-ring depicting the descent of the Goddess over an orgiastic dance of her handmaidens.¹

As in the case of the larger Knossian vault, the evidence is clear that this structure goes back to the palmy days of the last Palace period (L. M. II). This keel-vaulted type of built sepulchral chamber, as seen on a smaller scale in Crete itself, has evidently a considerable range there. Tombs of this class, more or less contemporary with those of Knossos, reappear in the West of the Island notably in the neighbourhood of Canea.²

This extensive range in the Island tends to show that the origin of the construction illustrated by the Royal Tombs of Minet-el-Beida and Ras-Shamra should be sought on Cretan soil, though—as in analogous cases—the existence of Cypro-Minoan intermediaries is only what might be expected.



FIG 755. BUILT SEPULCHRAL CHAMBER AT MINET-EL-BEIDA SHOWING APERTURE IN BACK WALL LIKE TOMB I OF ISOPATA.

Minoan Types of Vessel associated with Ras-Shamra Tombs.

Minoan
types of
vessel
asso-
ciated
with Ras-
Shamra
tombs.

Although the bulk of the relics found in or near the tombs on the latter sites—notably the faience 'head-goblet' and mask—are of L. M. III date, and, like the ivory reliefs there found, naturally show a close connexion with the Cypro-Minoan fabrics of Enkomi, Professor Schaeffer has rightly called attention to a certain number of vessels as clearly related to the products of the last Palatial Age of Knossos. They even approach its earliest limits.

Among the types reproduced in Fig. 756,³ the 'rhyton' *a* with a good if somewhat symmetrically rendered, octopus, which represents the L. M. III *a* element, while it differs in style and details from parallel examples found at

¹ See *P. of M.*, iii, p. 68, Fig. 38.

² In *The Tomb of the Double Axes*, &c., p. 9, reference is made to such tombs at Malami, about two hours West of Canea, and others

have since come to light in that region.

³ From photographs kindly supplied me by Prof. Schaeffer (cf. *Syria*, xiii, Pl. IV, 1 and 2).

Enkomi,¹ absolutely conforms to the Knossian traditions. The 'rhyton' with the bull's head in relief (Fig. 756, *b*), though unique in this respect, shows a decided relation to the fluted stone vessels of the kind from the Central



a



b



c

FIG. 756. PAINTED 'RHYTONS' (*a, b*) AND 'STIRRUP VASE', *c*, FROM MINET-EL-BEIDA.

Treasury,² at Knossos (see Fig. 760, *i*), while an analogy for the projecting animal's head is supplied by the earlier L. M. I *a* rhyton, from Palaikastro³ with the long-horned *agrimi's* head rising from its shoulder. Fig. 756, *c*, on the other hand, a large 'stirrup vase', from the extensive 'Enceinte Deposit',⁴ with its dark reddish ground and spiraliform ornament laid on in white, might at first sight recall one of the M. M. III *b* jars from the 'Temple Repositories'. The tradition is clear, but the 'stirrup vase' type itself indicates a somewhat later date. In the same way the alabaster vase⁵

¹ E.g. *B.M. Excav.*, p. 40, Fig. 68, no. 1091 (Tomb 69).

² Otherwise known as the 'Stone Vase Room'.

³ Cf. *P. of M.*, ii, Pl. II, p. 537, Fig. 341, where a comparison is also drawn with the similar head rising from the top of a vessel

among the gifts from Keftio-land on the Rekhmara Tomb.

⁴ Schaeffer, *Fouilles de Minet-el-Beida et de Ras-Shamra* (1931), *Syria*, xiii, Pl. VII, 1 and pp. 5, 6.

⁵ *Ib.*, Pl. IV, 4 and p. 3.

778 PEDESTALLED ALABASTER VASE OF MINOAN TYPE

(Fig. 757) represents a Minoan creation—derived from a painted Middle Kingdom Egyptian *alabastron*, with its stand incorporated and handles added, *more Cretico*¹ (cf. Fig. 759 *a*). That this alabaster type in a slightly



FIG. 757. 'ALABASTER' VASE, MINET-EL-BEIDA.

developed form survived into the succeeding Age is well established by a four-handled variant of it imperfectly preserved in the Cairo Museum (Fig. 758 *a*). This is en-



FIG. 758 *b*. INSCRIPTION ON ALABASTRON, FIG. 758 *a*, SHOWING CARTOUCHE OF QUEEN HATSHEPSUT.



FIG. 758 *a*. ALABASTER VASE IN CAIRO MUSEUM.

graved with the cartouche of Queen Hatshepsut (Fig. 758 *b*).² Its form and handles are of Minoan style, and it may be approximately referred to the close of the Sixteenth Century B.C.

A parallel type of pedestalled vase in painted clay, but with horizontally set and more prominent handles, can be traced back well into the Third

¹ See on this my observations, *P. of M.*, i, pp. 416, 417 and Figs. 301, 302, and compare *Ib.*, iii, pp. 402, 403, and Fig. 267: reproduced here in Fig. 759. Dr. H. R. Hall, who has reproduced the vase (Fig. 758 *a*) in his *Civilisation of Greece in the Bronze Age*, p. 200, Fig. 261, describes it as possibly of 'foreign marble', and compares the handles with those of 'pithoid' Minoan 'amphoras' and jars (*P. of M.*, ii, Pt II, p. 422 seqq.), the essential feature of

which, however, is the two or more rows, such as that depicted in Senmut's tomb. The real, composite prototype is there missed. A good example of the true Egyptian type of alabaster 'amphora'—which has no handles—is given by Fr. W. von Bissing, *Cat. Gen. des Antiquités au Musée de Caire, Steingefässe*, No. 18379, Pl. IV.

² From a photograph kindly supplied me by the Director of Cairo Museum.

Middle Minoan Period at Knossos¹ (Fig. 759, c), but specimens from Phaestos (Fig. 759, d) seem to be best referred to L. M. I. There is at least one good piece of evidence from the last quarter of the Sixteenth Century B.C. and



FIG. 759. EVOLUTION OF MINOAN PEDESTALLED VASE OF PAINTED CLAY FROM EGYPTIAN ALABASTRON AND STAND, A, OF THE XIIth DYNASTY; B, EGYPTIAN CLAY FORM, BUHEN; C, M. M. III a, KNOSSOS; D, PHAESTOS; E, KNOSSOS, ABOVE IVORY DEPOSIT.

the first half of the Fifteenth—by the time, that is, when the envoys from Keftiu-land were making their offerings to the Viziers of Hatshepsut and Thothmes III—that Minoan artistic products were already penetrating from the Syrian coast to the Euphrates.

'Mouth-piece of Faïence 'Rhyton' of Minoan Fabric from Ashur.

Among the faïence relics from Ashur is the separate mouth-piece of a type of 'rhyton' of the 'elongated' class,² such as is seen in the hands of the tribute bearers on the Rekhmara tomb, c. 1450 B.C. 'Rhytons' with the rim and neck in one piece detached from the body, into which it is made to fit, are already represented by steatite examples dating from the transitional M. M. III—L. M. I a epoch, at which time composite fabrics of various kinds were much in vogue. Probably of L. M. I b date is the specimen

Mouth-piece of faïence 'rhyton' from Ashur, of Minoan fabric.

¹ *P. of M.*, iii, pp. 402, 403, and Fig. 267; reproduced here in Fig. 759.

² For the derivation of the Minoan 'rhytons'

of this class by successive stages from earlier vessels in the shape of ostrich eggs, see *P. of M.*, ii, Pt. I, p. 225, Fig. 129.

of a veined limestone, of marble-like aspect (Fig. 760, *c*), found amongst the offertory vessels of the Central Sanctuary at Knossos presenting on its body arched flutings reduplicated, a characteristic kind of Minoan decoration that



FIG. 760. *a*, SEPARATE FAÏENCE MOUTH-PIECE OF 'RHYTON', ASHUR; *b*, SIMILAR OF MARBLE-LIKE LIMESTONE, KNOSSOS; *c*, THE WHOLE VESSEL.

Faience
mouth-
piece
from
Ashur
akin to
Knossian.

has a considerably earlier history. The separate mouth-piece of this vase is shown in Fig. 760, *b*, and the whole vessel in *c*. It will be seen at once that the faience specimen from Ashur, Fig. 760, *a*, bears a distinct resemblance to it. The bosses that are visible within the mouth of this, suggestive of repoussé work, may, indeed, be taken to show that the immediate model from which this faience object was taken, was, as so often the case, of metal-work. But it cannot be doubted that it approximates to Fig. 760, *b*, and its fabric could not safely be brought down later than the middle of the Fifteenth Century B.C. There can be no question of bringing it down to the date of the 'woman's head' goblets from the same site, which, like the similar relics from Ras-Shamra, are shown by the parallel find of Enkomi to be of Ramesside date, some two centuries later. On the Cretan side, it may be here recalled that a part of a faience vessel, Fig. 761, presenting the same kind of reduplicated



FIG. 761. PART OF FAÏENCE VESSEL FROM M.M. III *b* STRATUM, S.E. PALACE ANGLE, KNOSSOS.

fluting as Fig. 760, *c*, and termed, above, a 'blossom bowl', occurred at Knossos in the M.M. III *b* stratum near the South-East angle of the Palace, from which it seems to have intruded itself.¹

Persistent Traditions of Minoan Settlement in North Syria: its Cultural Importance.

A remarkable tradition, moreover, which in spite of its late date is too full of local lore and too consonant with archaeological records to be lightly passed over, brings Cretan colonists to the neighbouring height of Kasios, the 'ancient rock' overlooking the mouth of the Orontes, to which the long horn of Cyprus directly points. The Byzantine chronographer, John Malalas of Antioch,² makes the eponymic representative of the spot, King Kasos, identify these with Cypriote settlers, while Kasos himself, as son of Inachos, extends these relations to Mycenaean Greece.

Cuneiform Alphabet of Local Evolution.

The actual settlement of men of Minoan stock on the coastal strip immediately South of Mount Kasios brought them face to face with a race of much more ancient literary tradition, whose scribes were already achieving the first great step in alphabetic progress, the full reaction of which had to wait however for a somewhat later date.

The Library found on the Tell here contains cuneiform documents, not only of the usual Babylonian character, but of another class in a Semitic dialect that may be taken to represent the local Phoenician, a fact of still more capital importance on the Oriental side. For these latter, besides including the first literary compositions of that language hitherto known—among them the poem on the 'Birth of the gracious and beautiful Gods'³—has supplied specimens of writing showing the cuneiform script reduced to

Birth-place of Alphabet in cuneiform guise.

¹ See *P. of M.*, II, Pt. I, p. 310, and Fig. 181.

² Malalas, viii (p. 201, ed. Dindorf), aptly cited in this connexion by Professor Dussaud (*Syria*, x (1929), pp. 301-3). Malalas says that Seleukos Nikatôr in founding Antioch had imitated Kasos by planting Cretan colonists there. Inachos was the father of Kasos according to Stephanus of Byzantium. The

baetylic, sky-fallen shape of Zeus Kasios—of the Double Axe—would have appealed to Cretan religious notions.

³ Translated by Monsieur Ch. Virolleaud, *Syria*, xiv (1933), p. 128 seqq. Another song is the Poem of Alein-Baal which was published by M. Virolleaud, *op. cit.*, xiii, p. 113 seqq.

the alphabetic limits of twenty-eight signs, at a date considerably preceding the first appearance of the Phoenician alphabet.¹

That this revolution in the Art of Writing should have taken place in a community which stood in such early relations with the Minoan world is an outstanding fact of the greatest potential import. The possibilities that it suggests may, however, be wisely left to a reserve account, since, as shown above, even the advanced linear script (B) of Crete, which was disseminated as far as Cyprus, was still far from approaching the alphabetic standard so far as the number of its characters was concerned. It had some sixty signs in ordinary use. Half at least of the signs, however, were of a simplified linear class ready, as it were, for alphabetic selection, and its straightforward arrangement went far beyond either Assyro-Babylonian cuneiform methods or the grouping of Egyptian hieroglyphs. *Per contra* it is interesting to observe, as a possible reaction from this side, the adoption of the vertical lines of division between words by the new alphabetic cuneiform script—universal in the Minoan linear systems but unknown to the Assyro-Babylonian scribes.

In any case the unique place occupied by the tablets of Ras-Shamra lends a particular interest to the settlement here of representatives of the Aegean culture, who, indeed, for awhile cut short the Oriental traditions of the site.

That the builders of these fine sepulchral vaults, to which Monsieur Schaeffer has fittingly applied the term 'royal', brought with them their own method of writing might itself be assumed, though the materials on which it was applied were of a perishable nature. But there is one actual specimen of an inscription which can be claimed definitively to belong to the Minoan linear script.

Votive Silver Bowl with Graffito Inscription of the Knossian Class B.

Votive deposit with silver bowl presenting Minoan inscription.

Among the somewhat later constructions of a poorer character that border on the finely built Library of Ras-Shamra, there was found, placed against the foundation wall, a jar, containing a mass of objects, mainly of silver, but a few of gold.² These included jewellery, a bent ingot bar, and much distorted bowls. In the intentional deformation and the actual

¹ Virolleaud, *op. cit.*, x (1929), p. 305 seqq. *von Ras Shamra* (Halle, 1930).

That the language expressed by these signs is Semitic was brilliantly demonstrated by Dr. Schaeffer, *Syria*, xiii (1932), pp. 22, 23 and Hans Bauer, *Entzifferung der Keilschrifttafeln* Pl. XVI.

breaking up of some of the relics a religious motive is clearly perceptible and, indeed, some pendant plaques show rude figures of the local Ishtar. The objects may have been originally offerings in connexion with the neighbouring Temple. Among them was a much bent silver bowl

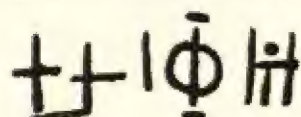


FIG. 762. GRAFFITO INSCRIPTION ON VOTIVE SILVER BOWL: RAS-SHAMRA. (2).

bearing the inscription, Fig. 762.¹ Here the second of the two signs, curiously linked by the line below, is the Minoan \vdash . It is not a repetition of the 'cross' sign \vdash , though its spur somewhat protrudes beyond its stem on the left side. There follows the regular upright stroke, dividing sign-groups, the ϕ -like character, of which examples are known on four Knossian tablets of the B class, and the constantly recurring \equiv —often, as here, with the upper line reduced to a dot. The inscription in the regular script of Class B would thus read $\vdash \vdash \phi \equiv$.

Signs of Class B.

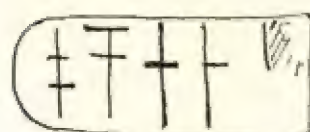


FIG. 762 *bis*, a.
(FROM 'CHARIOT TABLET' DEPOSIT.)

It is interesting to observe that the initial sign-group of this inscription recurs on the first half of a small tablet (Fig. 762 *bis*, a)² as the terminal characters of what in that case we should naturally regard as a personal name. These signs may therefore in that case be regarded as forming part of a compound name, one element of which is seen inscribed on the votive silver bowl.

A few further remarks suggest themselves. On the B tablets there are precedents for the reversed collocation $\vdash \vdash$ at the end of what appear to be

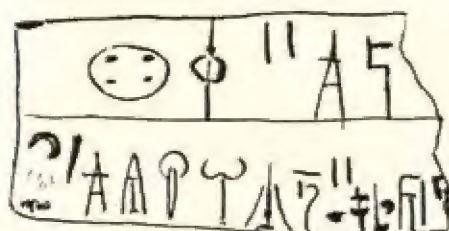


FIG. 762 *bis*, b. FIRST SECTION OF TABLET, KNOSSOS.

name-groups. In one case (Fig. 762 *bis*, b)³ we find the inscription $\odot \phi$, thus bringing this ϕ -like sign into relation with that connected with grain. The group is followed by numbers = 2. On another tablet the group in which this sign occurs begins with the 'throne and sceptre':

$\equiv \Psi \phi \Psi$.

The ϕ is not found either among the Mainland examples of Class B or in the Cypro-Minoan group, though in both these cases the number of

¹ Reproduced from Schaeffer, *op. cit.*, p. 23, Fig. 15. (Enlarged 2 diameters.)

² Belonging to the 'Chariot Tablet' deposit.
³ No. 779 in my hand-list.

known signs is too limited for negative evidence to be regarded as conclusive. There is, at any rate, sufficient warrant for recognizing the inscription on the bowl as, generically speaking, Minoan of Class B. It may well—like other objects of the deposit—have had a votive character representing the tribute of an alien newcomer to the Religion of the spot, such as was, doubtless, the inscribed clay ram from Eski Samsoou.

Alphabetic character of signs.

It may be regarded as a noteworthy circumstance that this inscription is not only alphabetiform, but alphabetic—three out of its four signs recurring in one or other of the Greek alphabets. That this dedication, representing the highest development of linear script known to the Civilized World of those days, should have lain almost side by side with documents in which the great principle of alphabetic selection had been first applied to such otherwise intractable material as the cuneiform characters is itself a suggestive phenomenon. On the one hand we see the highest formal development, on the other the artificial reduction of characters to compassable limits.

May there have been some interaction of these fertilizing elements? We cannot forget that it was in the neighbouring coastland that the Phoenician alphabet was born in the succeeding Age.

§ 114. DEPOSITS OF TABLETS DEPICTING CHARIOTS: MINOAN TYPES OF THESE AND THEIR ORIENTAL ORIGINS.

Military aspects of New Dynasty—the Shield Fresco; Significant break in the history of neighbouring sites; Hoard of tablets depicting Chariots; Formulas on 'Chariot Tablets'; Throne and bisellium signs; Numbers before whole Chariots and parts; Body and parts of Chariots separately depicted; Pole and characteristic support, Yoke and Collar; Wheels—in relation to Minoan roads; Four-wheeled vehicle on Tylissos tablet; Four-spoked wheels as in contemporary Egypt and Syria; 'Geometrical' Greek and other later wheels six and eight-spoked; Saw on 'Chariot Tablets'—Carpenter's sign; Horse's head on 'Chariot Tablets' and derivative sign; Fodder sign; Corslet or breast-plate on 'Chariot Tablets'—part of full 'Knight's equipment'; Bronze talent shown as equivalent; Signs on Corslets; Cup-sign of Official—Cup-bearer's symbol; Whip sign; First appearance of wheeled vehicles in Crete—miniature wagon in painted clay from Palaikastro, M. M. I a; Chaldaean prototypes of Chariots; Primitive Mesopotamian Car-type, A—pole projecting from bottom; Draught animals—oxen and asses; Chariots on 'War panel' of 'Standard' of Ur; Chariot Type B—pole running up front of box; Sumerian Chariots of Type B; Persistence of Type B on Chaldaean sites; Diffusion of Type B in Hittite regions; Its appearance in Aegean area; Good example of B on Thisbê bead-seal; Type B in Cyprus L. M. III a; Chariot Type C, with upper support to pole; General Minoan use of Type C; Early example on Vaphio bead-seal; 'Dual' form of Chariot on Tablets—its general diffusion; Intrusion of a Syro-Egyptian form in Cyprus; Sardonyx ring from Avdu, near Lyklos, with Chariot of Type C drawn by wild-goats; 'Dual' Chariot (Type C) of Tiryns Hunting fresco; Survival of Type C in early Greek Art.

Militaristic Aspects of New Dynasty at Knossos: the 'Shield Fresco'.

It has been remarked that the last Palatial phase at Knossos presents a military and indeed militaristic aspect. Its most prominent feature, when the residential Quarter was still complete, must have been the great Shield Fresco¹ winding down from story to story along the descending walls of its

Military aspects of New Dynasty; the 'Shield Fresco'.

¹ For the Shield Fresco see *P. of M.*, iii, p. 299 seqq., Fig. 196, and Coloured Plate XXIII. Its execution is there referred to the close of L. M. I a epoch (p. 307), but certain considerations developed below bring it nearer

the beginning of L. M. II. It belongs to the initial phase of the last Palatial Age marked at Knossos by the appearance of the Linear Script B, and presenting many indications of the advent of a new dynasty.

Grand Staircase and leading thus, we may conclude, to the material realization of its subject, the Shields themselves, namely, suspended along the similar dado frieze in the great Hall below. When, indeed, after the great catastrophe, the spirit and perhaps the actual persons of the Knossian lords transported themselves to the Mainland side, its psychological expression lived again in this respect in the closely imitative Shield frieze, less ambitious in its scale, on the walls of the later Palace at Tiryns.¹

Significant break in history of neighbouring sites.

In Crete itself the appearance at Knossos of what there is every reason to believe to have been a new and aggressive dynasty about the beginning of the Fifteenth Century B.C., is marked not only by the break in continuity visible in the remains of a series of smaller sites along the Northern Coast, from the neighbouring Tyliossos to Nirou Khani and Gournià, but by the eloquent cessation of the great rivals at Phaestos and Hagia Triada, bordering the Libyan Sea.

The bureaucratic methods evidenced by the documents in the form of the linear script, B, introduced by the new dynasty, sufficiently declare the authoritative character of the government as regards internal matters. On the other hand, the military parade visible in the continuous frieze with rows of full-length shields, winding down the walls and galleries of the Grand Staircase to the Great Hall that seems to have actually displayed them, finds its counterpart in the appearance of three important deposits of clay tablets principally relating to armament.

The 'Chariot Tablets'.

Hoard of 'Chariot Tablets'.

These hoards themselves stand in a certain administrative relation to the building, unfortunately very imperfectly preserved, known as the 'Armoury'. This was situated on the Northern border of the paved 'Via Sacra' leading from the 'Reception Area' to the 'Little Palace', just off its Central Section, where the road slightly dips. How far the royal chariots with which these records mainly deal were able to penetrate within the Northern gateway cannot be clearly ascertained from the existing remains on that side. But the fact remains, that the two other deposits connected with the present series were found respectively near the point where the Northern Entrance Passage reaches the Central Court and, again, on the South-West border of the Court itself.


The last-mentioned—known *par excellence* as the 'Deposit of Chariot Tablets'—though largely found in a fragmentary state, and including many

¹ See, too, Dr. G. Rodenwaldt's remarks, *Tiryns*, ii, p. 34 seqq.

remains of documents referring to other classes of possessions, is the only one in which the Minoan war chariots, as they existed in the last Palatial Age of Knossos,¹ are depicted in their complete form, together with objects closely associated with them, such as the horse's head and the cuirass or, in some cases, the ingot. But there were also found here—as, to a much greater extent, in the 'Armoury Deposit'—tablets relating to separate parts of the chariots, such as the chassis or wheels.

A good general idea of the chariot forms here represented can be gathered from Fig. 763, all of them showing the later, bowed appendage behind, which come into vogue at this epoch. The documents begin as usual with what may be regarded as the name and, at times, the title of the individual concerned, the first character in *a* being the 'throne and sceptre'. These personal references are in most cases followed by a pictorial figure of a conventionalized kind which is below identified with a cuirass or corslet, though occasionally, as in *l*, this object is placed after the horse's head. The middle is reserved for the chariot itself, succeeded by the horse's head, though for brevity's sake, as in the small tablet, Fig. 763, *i*, the head seems to be also taken to cover the chariot. In the concluding specimen (Fig. 763, *m*), which is from the Northern Entrance Passage, a part of the chariot is seen—as so frequently in the Arsenal group—without wheels.

Chariot types and formulas on tablets.

The name or titular description  that appears in large characters at the beginning of *m*, recurs on several more fragmentary specimens of the 'Chariot Tablet' deposit and is noteworthy from its reappearance in a similar relation on clay documents of the Arsenal hoard. Its initial character has a special interest since its large body makes it difficult to identify it with the 'horns of Consecration'. It is practically a kind of confronted pair of two 'throne' signs, as shown in Figs. 763, *m*, and 767, *a* and *b*, though without the crook sceptre. That it is, in fact, intended to depict some kind of *bisellium* is further indicated by the division of its base in Fig. 763, *m*, into two separate lines.

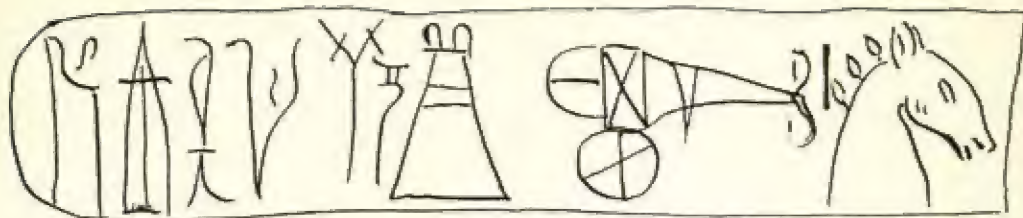
Throne and 'Bisellium' signs.

In contrast to the large numbers attached to the chassis and wheels in the documents given below, the complete chariots on the class of tablets with which we are dealing are followed by only a single upright stroke. In certain cases the horse's head is also accompanied by the single stroke, though we should naturally suppose it to represent a pair. The 'cuirass', on the other hand, is more usually succeeded by two strokes.

Numbers of whole chariots and parts.

Attention may also be called to some variant features in the details of

¹ See A. E., *Report, Knossos, 1900* (*B.S.A.*, vi), p. 29 and pp. 57, 58 (Fig. 12).



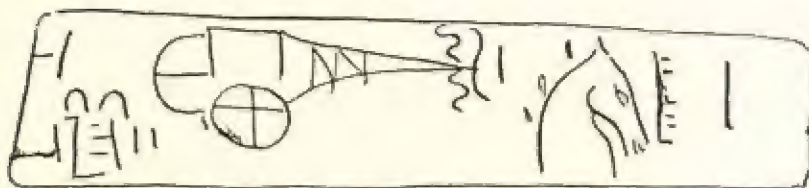
a



b



c



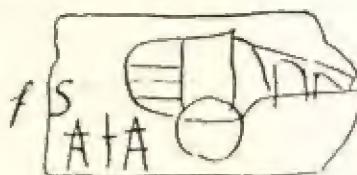
d 220



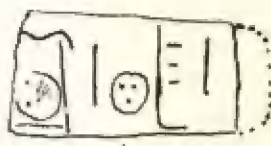
n



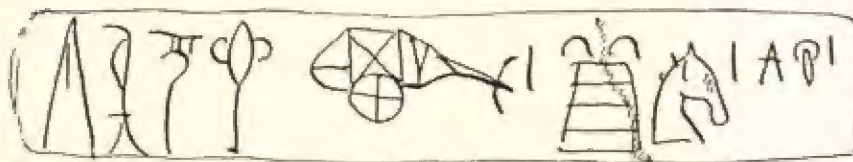
e 227



f



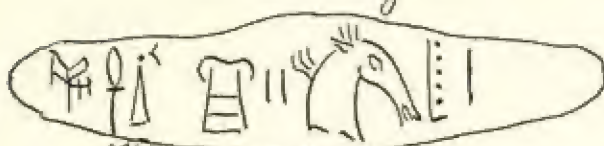
h



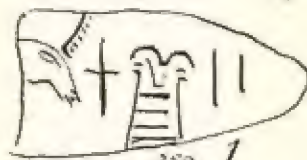
g 225



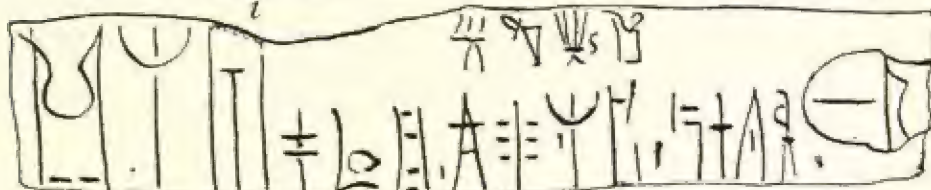
k



i 232



l 239



m 279

FIG. 763. SPECIMENS OF TABLETS FROM 'CHARIOT TABLETS' DEPOSIT.

the chariots depicted, such as the cross-lines visible on its flank in *a*, *e* and *g*, and the three horizontal bars inserted in the bowed projection behind in the case of *f*, and the 'spur' below it in *b*.

Of these, the cross-pieces on the side represent an obvious way of strengthening the square framework of the side of the chariot box. At other times, in the case of the wheelless versions of the chariot, we are made as it were, to look through this framework at a seat sometimes, as in Fig. 763, *m*, resembling the 'throne' sign. The 'spur' of Fig. 763, *b*, may recall the dagger-like projection behind the Chariot on the stela from Grave V at Mycenae.¹ This latter, however, is probably explained by reference to the sword slung from the side of the box of the chariot on another stela from the same Grave.²

Body and Parts of Chariots.

The rich deposit from the Armoury greatly supplements our knowledge derived from that of the Chariot tablets above illustrated. These belong to two main classes, one only showing the chassis or essential framework of the car, the wheels as separate items; the other, of which specimens are shown in Fig. 766, supplying a very complete record of the body of the chariot and its trappings, including the pole, the connecting thong above it with its appendages, and apparently the two horse collars, but entirely omitting the wheels.

Body and
parts of
Chariots.

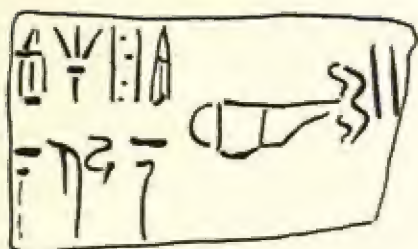
It will be seen that in these cases the general character of the document itself is of a different kind. There are here no pictorial signs referring either to horse or owner, nor signs connected with either, such as the whip or corslet. On the other hand, the inscription itself is much fuller. The 'throne and sceptre' frequently recurs, and the *bisellium* also appears.

In the other main class from this deposit, as in a certain number of tablets from the other hoards, nothing beyond the merest outline of the body on a 'chassis' is given (see Fig. 763, *m*). Evidently this fundamental part of the construction could be regarded—as it is to-day—as a separate article of manufacture, reserved for the carpenters, much of the rest of the work, such as was concerned with leather-cutting, being in the hands of the curriers. This division of labour is very fully illustrated by a well-known

Pole and
character-
istic sup-
port.

¹ Schliemann, *Mycenae*, p. 86, Fig. 141 (cf. Schuchhardt, *Schliemann's Excavations*, p. 176, Fig. 147).

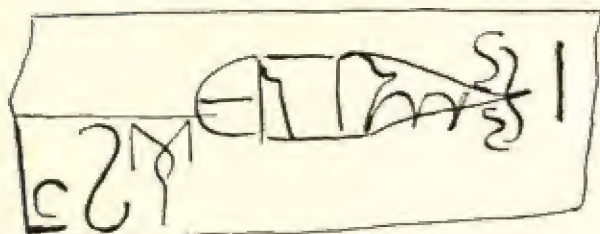
² Schliemann, *loc. cit.*, p. 171, Fig. 146.



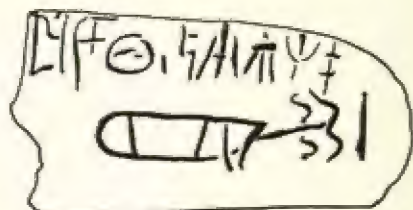
a



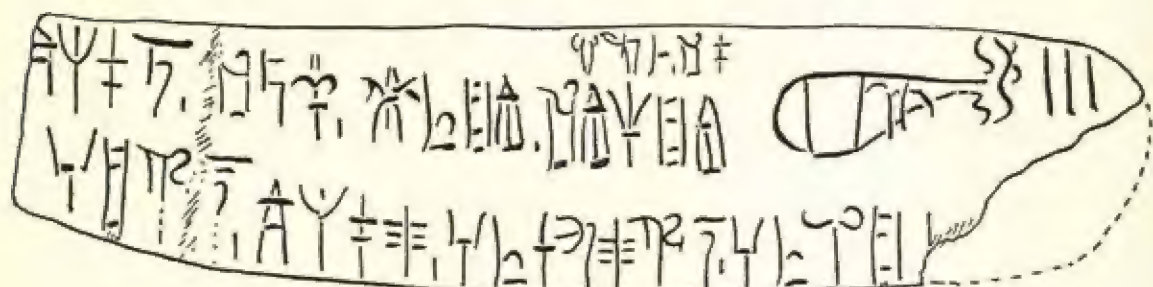
b



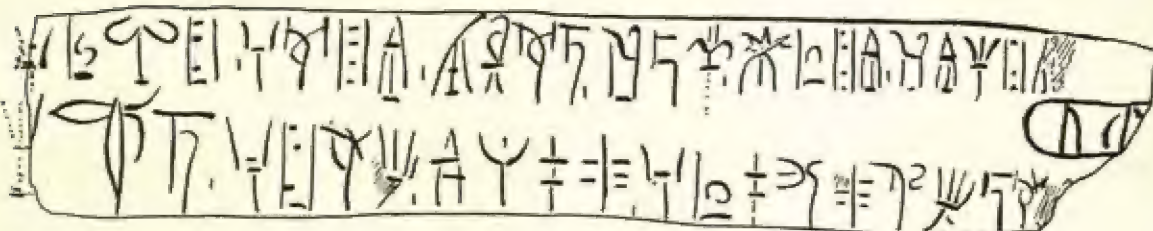
c



d



e



f

FIG. 764. TABLETS FROM 'ARMOURY' DEPOSIT SHOWING CHARIOTS AND TRAPPINGS, BUT WITHOUT WHEELS.

Egyptian relief from Thebes (Fig. 765),¹ of Amenhotep II's time, c. 1450 B.C., and therefore of a date more or less corresponding to that of the Knossian



FIG. 765. MANUFACTURE OF EGYPTIAN CHARIOT ON THEBAN RELIEF, c. 1450 B.C.

tablets. It will be seen that the body and pole, as a separate item, much resemble those seen in Fig. 766.

The upper support of the pole is thoroughly characteristic of the Minoan chariot. It was certainly composed of a thong or cord, and attached to it were appendages—apparently of a decorative character. They certainly stood in no functional connexion with the pole, since the points often terminate above it, or are prolonged below it, as on many of the tablets. It is well shown on a chariot depicted on a remarkable Cretan intaglio, described below, found at Avdu, East of Lyktos, where the chariot itself is drawn by Cretan wild-goats.²

The yoke is hung at the end of the pole, and, somewhat behind it, are visible pairs of curving objects which apparently represent the collars of two horses, sometimes each in two pieces. In Fig. 765 we also see, in addition to these, two small curving objects in front of the yoke which may represent nose-straps.

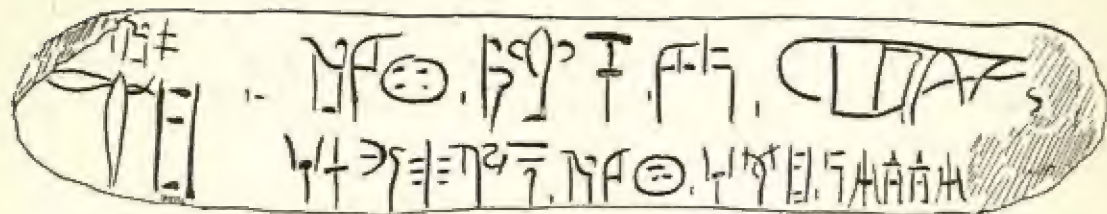
Some account is given below³ of the origins and connexions of the

¹ Wilkinson, *The Ancient Egyptian* (1878 ed.), p. 232, Fig. 65, and cf. his commentary, p. 21. The semicircular knife (*c*) is of the form used for cutting leather. 'The artist has distinctly pointed out the nature of the substance employed by figuring an entire skin (*l*) and the soles of a pair of shoes.' *h-h*

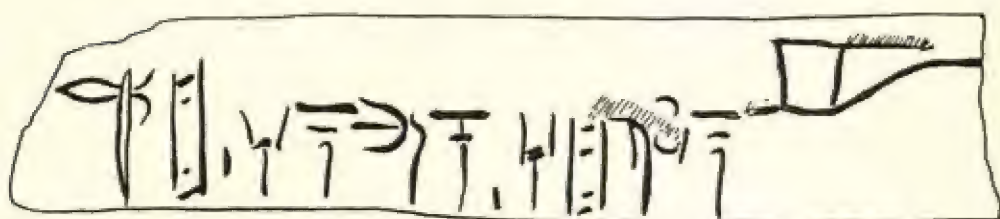
is interpreted as horse collars, *m*, girth, *n* part of collar. *i*, *k*, *o* are quiver and bow cases. The body, pole, and yoke are seen already prepared.

² See below, p. 823, Fig. 803.

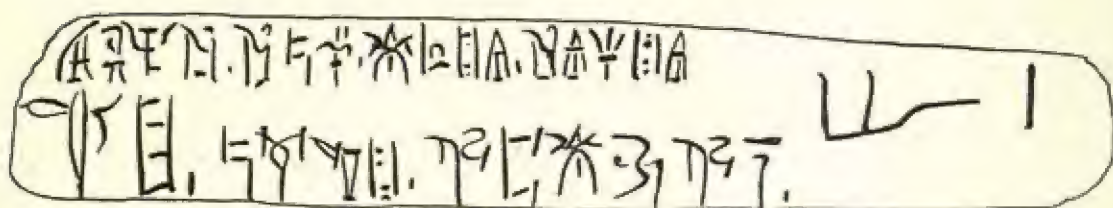
³ See below, p. 821 seqq.



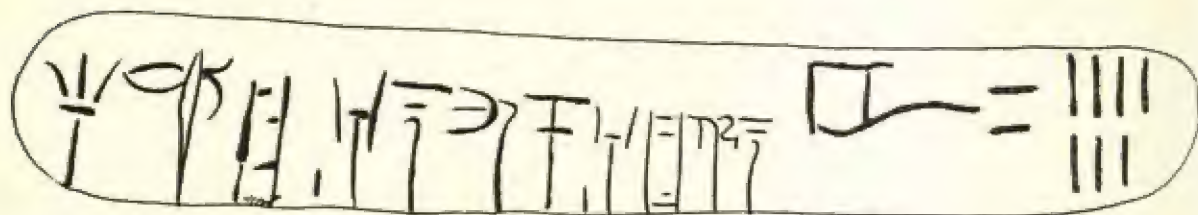
a



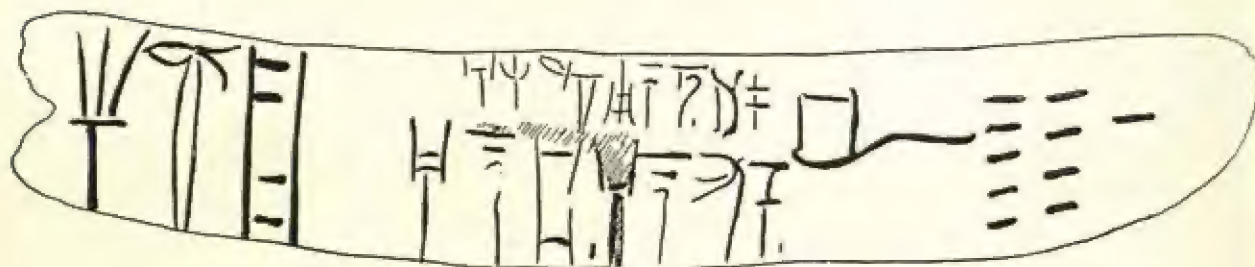
b



c



d



e

FIG. 766. TABLETS SHOWING WHOLE OR PART OF FRAMEWORK OF CHARIOTS WITHOUT THE WHEELS.

class of chariots with bowed prominences behind, which as we see, had come into general vogue at Knossos during the last Palatial period.

The Wheels.

The natural complement to the tablets presenting wheelless chariots—otherwise complete in all details—is supplied by a series in which wheels alone appear. The numbers connected with them speak for themselves.

Wheels in relation to Minoan roads. Large numbers required.

Considering the rugged nature of the greater part of the surface of Crete, the expenditure on wheels entailed by this cause on its chariot-driving lords, must have been enormous. Though the active road and bridge-making initiated by Venizelos in his native land from the first moment of the Union has done wonders in overcoming the natural obstacles, there was, in the days of Turkish dominion, hardly a single made road fit for wheeled traffic from one end of the Island to the other.

It had become clear through the evidences partially collected in Volume II of this Work that Minoan engineers had made serious attempts to grapple with the question of communications. The existence was there demonstrated of some kind of Minoan paved way bringing Knossos into connexion with a port on the Libyan Sea, and the traces were noted of a zig-zagging road up the steep slopes of Juktas and in many remote glens of the East of the Island. The scientifically made way, with its central paving and lateral concrete strips—the *Via Sacra*, that links the reception area of the Palace on the North-West with the 'Little Palace' on the hillside opposite—is an existing monument of their skill that can still maintain its claim to be the oldest road in Europe, and there is every reason to believe that an equivalent made route led from Knossos to its haven at the mouth of the Kairatos, and, perhaps, another to its Eastern outlet at Amnisos. But, despite all these efforts, it is difficult to believe that highways fit for wheeled traffic could have had any really wide extension over the rock-set steep slopes that—without any real break—form the long backbone of Crete, from Dikta to Ida and from Ida to the White Mountains. Ignorance of blasting must itself have made the construction on any comprehensive plan of roads with gradients and a surface fit for wheeled traffic quite impracticable.

But it is evident from the activity of the Wheelwright Department of the Armoury that a considerable amount of wheeled traffic existed in and round Knossos itself. Tablets from the deposits in that area, of which six examples are given in Fig. 767, show wheels connected with numbers, in one

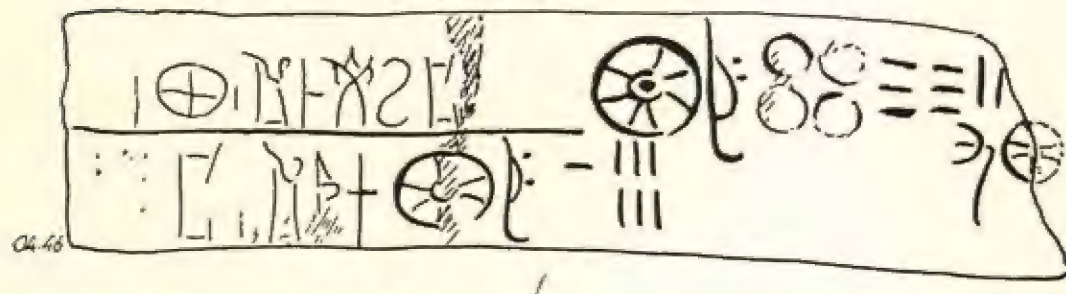
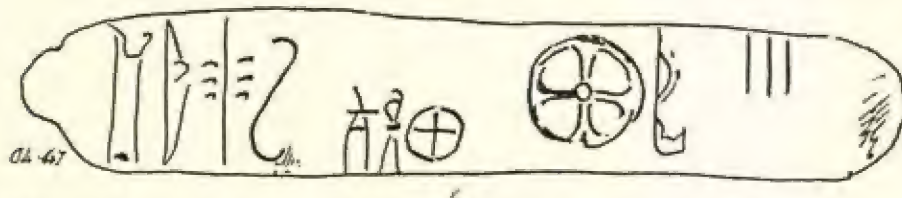
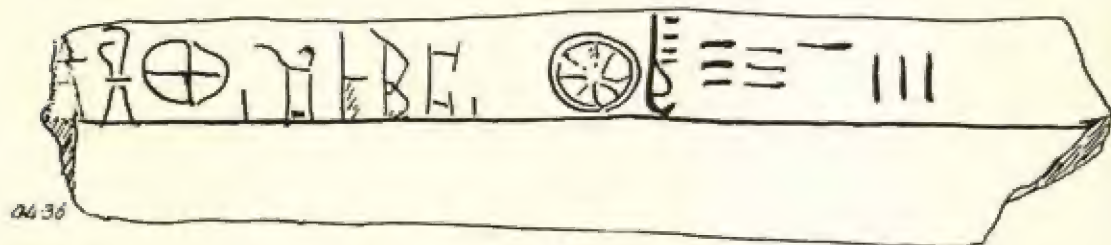
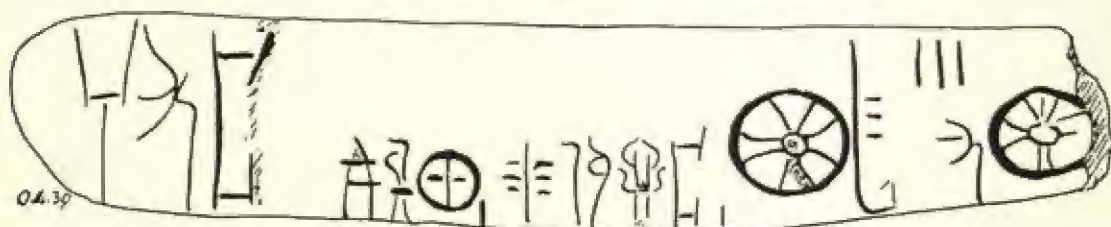
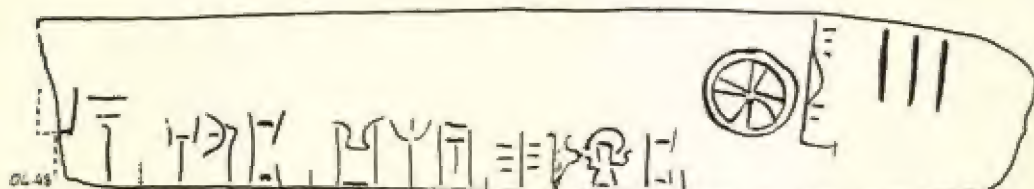
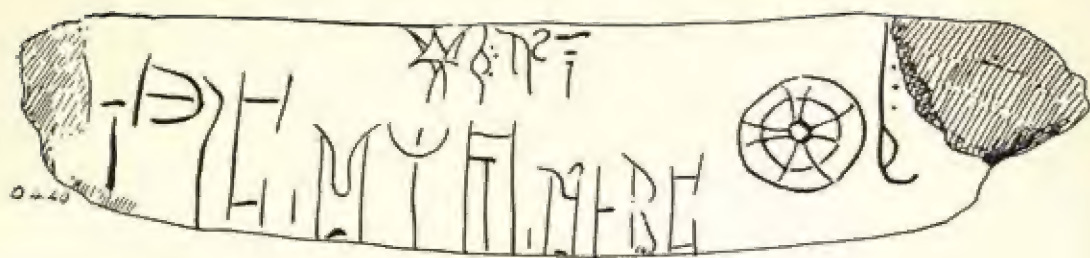


FIG. 767. SPECIMENS OF TABLETS WITH CHARIOT WHEELS: 'ARMOURY' DEPOSIT.

case (*f*) up to 478 in a single document. This is an exceptionally large sum, but the amounts on nine fairly complete tablets give an average of about 73 to each. A large proportion of the inscriptions present groups beginning

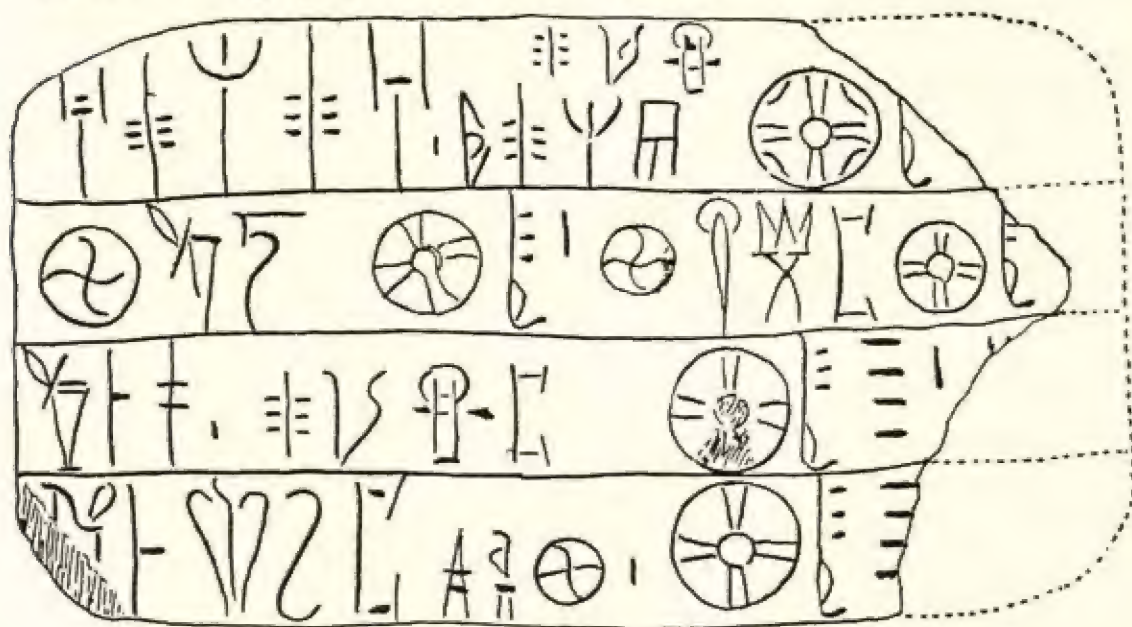























FIG. 768. 'CHARIOT TABLET' WITH WHEELS; NORTH-ENTRANCE DEPOSIT.

with the 'throne and sceptre',¹ and it is a noteworthy circumstance that in two cases (*a*, *b*) the *bisellium* sign  is substituted for it in a similar group.² These indications stress the official character of these documents.

A good specimen of a broader type of tablet referring to chariot wheels, from the Northern Entrance Deposit, is reproduced in Fig. 768. It contains four entries, though the numbers—amounting to forty odd—are only preserved in two cases.

The chariots with which we are concerned and which had primarily a military purpose,³ had only two wheels. That a four-wheeled type,

¹ E.g.,                    

Four-wheeled vehicle on Tyliisos tablet.

in which the hinder pair were solid and of larger size, existed at a slightly earlier date appears from a fragmentary tablet of Class A, from Tyliisos, Fig. 769.¹ It was certainly the safer plan on a Cretan road. Of the much earlier clay model of a four-wheeled wagon from Palaikastro more will be said below.

Four-spoked Type of Minoan Wheels.

Four-spoked wheels—as in contemporary Egypt and Syria.

It will be seen that in all cases the wheels have only four spokes. This number, indeed, is not exceeded in any known representation of a true Minoan or Mycenaean chariot. The chariots of XVIIth and XVIIIth Dynasty Egypt are also universally four-spoked. But during the same period the Syrian enemies of the Pharaohs are seen with chariots fitted with wheels containing a larger number of spokes. In the Egyptian illustrations of the great battle of Megiddo, won against these foes by Thothmes III (c. 1500 B.C.), Syrian chariots appear with six and eight spokes to their wheels. It seems that from this time onwards these many-spoked types predominated in Western Asia, though the simpler form still survived there. By the time of Rameses II the Oriental usage affects the Pharaonic, and in the battle of Kadesh the Egyptian, as well as the Hittite chariots, have six spokes to their wheels. In Rameses III's reign (c. 1194 B.C.) the barbarian invaders of Egypt the Pulasati, Akayvasa, and their comrades from Anatolia, and perhaps even from Crete and the Aegean islands, were already possessed of wheels of this six-spoked construction. In Assyria the eight-spoked type gained ground on the others. In Cyprus it also occurs in the early post-Minoan epoch.²

Even apart from the direct evidence supplied by the Egyptian monument as to the chariots used by the Viking swarms from the North and West who made their combined assaults on Egypt in the Twelfth Century before our era, it is natural to suppose that the new methods of wheel-construction in vogue in Syria and Egypt would have found imitators in

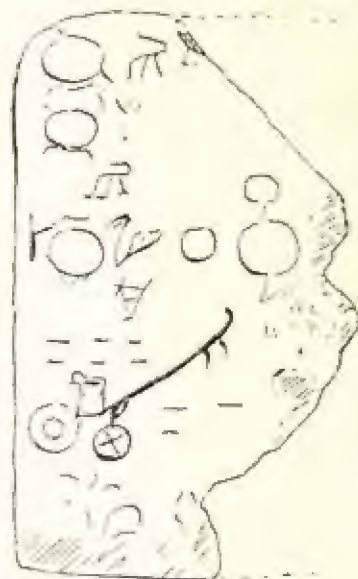


FIG. 769. FRAGMENTARY TABLET OF TYLISSOS, SHOWING CHARIOT WITH FOUR WHEELS.

'Geometrical' and other later wheels six-spoked.

¹ From my copy in J. Hatzidakis, *Τάραχος Μινωική*, p. 214, Fig. 20.

Cyprian *oenochoē* in the British Museum Perrot et Chipiez, iii, p. 716, Fig. 527.

² See, for instance, the chariot on the

the Aegean world. It is true that the rude cars and wagons on the Dipylon vases show wheels of only four spokes, but one on a Cretan painted vase of the Geometrical class¹ is fitted with six-spoked wheels, and the small bronze wheels from votive cars found at Olympia and belonging to the same Geometrical period have six and eight, as well as four spokes.² Similar small wheels, sometimes still attached to votive cars and vessels, and exhibiting six, eight, and even nine spokes, occur in the contemporary deposits of Italy and the Balkan and Danubian lands dating from the close of the Bronze and from the Early Iron Age.³ In Greece itself six-spoked wheels are seen on chariots depicted on vases of the succeeding Melian class, though—perhaps as the result of religious conservatism—the four-spoked type prevails in Greek chariots belonging to the fully developed period of Art.

Later wheels with eight spokes.

The 'Saw' on the 'Chariot Tablets' as Carpenter's Sign.

On the 'wheel' tablets—constantly repeated after the wheel itself and before the numeration—appears a sign which, without a knowledge of its life-history, might well be difficult to interpret. It goes back by easy stages, however, to the pictographic figure of a saw of an Early Nilotic and Egyptian class (Fig. 770, *b*) which is fully represented in the Cretan Hieroglyphic series (Fig. 770, *a*).⁴ It is in fact copied from Egyptian wooden saws, imitating the jaw of an animal and set with flint teeth.⁵ This is one of the cases where the later Signary has preserved a more literal outline of the original form than that of Class A. This form of saw was copied in copper under the early Egyptian dynasties, but it is far removed from the much more modern type of

Saw on Chariot-tablets—Carpenter's sign.

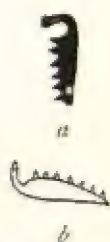


FIG. 770. *a*, 'SAW' SIGN OF CRETAN HIEROGLYPHIC SERIES; *b*, EGYPTIAN 'SAW' SIGN, *ws*.

¹ Excavated by Miss Harriet Boyd (Mrs. Hawes) from a tomb near Kavusi (*Am. J. A.*, v (1901), pl. 111).

² *Olympia*, *Tafelband* IV. Bronzen T. xv, 252 and T. xxv, 508.

³ In Italy they already appear in the late Bronze Age deposits of the Terremare (e.g., Montelius, *La Civilisation Primitive en Italie*, i, p. 150 and Pl. 23, Fig. 14, and cf. Fig. 15). A duck-shaped vessel of clay belonging to the First Period of Este, transitional between the Bronze and Early Iron Age, was supported on

wheels with nine spokes (*op. cit.*, Pl. 50, Fig. 8*a*). A similar wheeled vessel of bronze from a barrow at Glasinatz in Bosnia, belonging to the Early Iron Age of that region, has 8 spokes to its wheels (*Mitth. d. Anthr. Ges. in Wien*, 1891, p. 289 seqq.). Wheels of eight spokes already occur.

⁴ A. E., *Scripta Minora*, i, p. 189, No. 23.

⁵ The primitive type is not given in Petrie's *Tools and Weapons*, though a copper successor of Early Kingdom date is there illustrated (Pl. I, 4: Vith Dynasty).

798 'SAW' SIGN AFTER CONVENTIONAL HORSE'S HEAD

bronze saws—some of extraordinary length, and with collared handles¹—found in the Late Minoan deposits both at Knossos and Hagia Triada.

In some cases the 'saw'-sign stands immediately after another shown

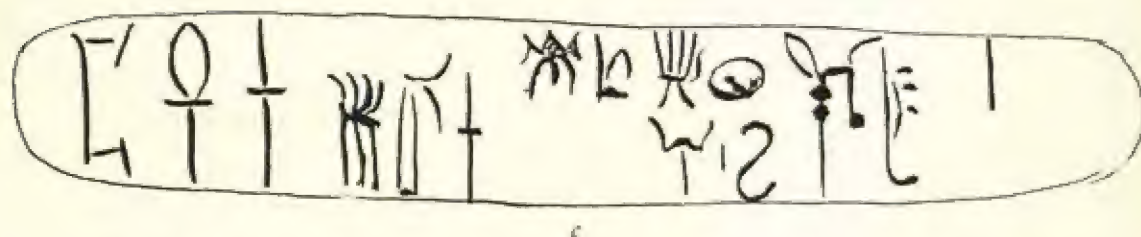
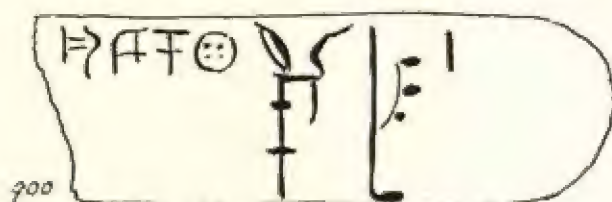


FIG. 771 *a, b, c*. TABLET SHOWING 'SAW' AFTER CONVENTIONALIZED HORSE'S HEAD SIGN.

below to be the conventionalized derivative of the horse's head² (Fig. 771, *a, b, c*), which is sometimes (see Fig. 771, *a* and *c*) preceded by the 'corn' or 'food' sign.³ In such cases it seems possible that the 'saw' may be taken to represent the fabric of a whole chariot, a conclusion supported by the fact that the number following it, where preserved, only consists of a single unit.

It looks, indeed, as if the whole class of tablets relating to chariots may have been of the nature of warrants entitling the person concerned either to receive the object in a more or less complete form, or to order its construction for his benefit. With regard to the 'corslet' or 'cuirass'

¹ See *P. of M.*, ii, Pt. II, p. 630 and p. 632, Fig. 393, *c, d, i*, and Fig. 394, 5.

² See below, p. 800, Fig. 774.

³ See Figs. 776–8, p. 802 below.

which appears on some of the tablets, we shall see that the order was in cases commuted for a pecuniary equivalent consisting of one bronze talent.

The Horse's Head and its Derivatives.

The horses' heads, so constantly recurring on the 'chariot tablets' before the chariot itself, supply an interesting illustration of the device of

Horse's head on Chariot tablets and its derivative.

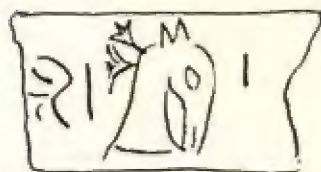


FIG. 772. HORSE'S HEAD ON TABLET, SHOWING TASSELS.

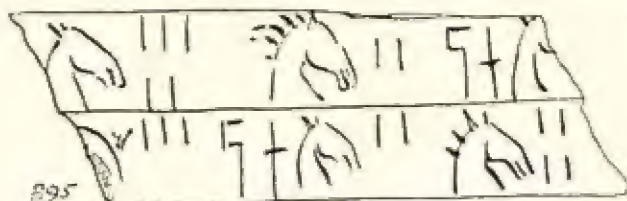


FIG. 773. TABLET WITH HORSES' HEADS.

primitive pictography by which a part is made to stand for a whole. They vary a good deal in execution, but as a rule the characteristic outline is hit off with a few rapid touches which imply a certain skill in drawing on the part of the scribe. In nearly all cases the hair of the mane is shown tied up in three separate tufts. In Fig. 772 there are only two, made up into somewhat more elaborate tassels. These top-knots are characteristically Minoan, and are well shown on a fresco fragment depicting a horse's head found in the 'Men's Hall' at Mycenae;¹ another from the stag-hunting scene at Tiryns is also illustrated below.²

On the exceptional tablet, Fig. 773, from the Northern Entrance Passage hoard, there appear six horses' heads, the numbers attached to five of which are preserved, amounting to 5, 2, 3, 2, and 4. In the case of the first, third, and fifth of these the heads are maneless, and the two latter of these (and perhaps, originally also the first) are distinguished by the inscription 5†.³ It looks, then, as if they were meant for a special kind of horse, though its connexion with the 'chariot tablet' group is established by the recurrence of the same collocation of signs in a terminal group, 5†A1,⁴ immediately

¹ Tsountas, *Εφ. Ἀρχ.*, 1887, Pl. XI, p. 165.

² See below, p. 829 and Fig. 811.

³ The later Cypriote syllabary offers *po-lo* as equivalent of this sign-group, and those who believe that the Minoan Cretans were a Greek-speaking people will doubtless turn to *πῶλος*

for comparison. For the Old Cretan word for horse a possible clue may be found in the Carian *ala* which had that meaning. (Steph. Byz., s.v. Ἀλάβαρδα; also Ὑλλοίαλα.)

⁴ The two concluding signs of this group suggest a casual ending.

before the hinder part of the wheelless framework of a chariot on the tablet, Fig. 763, *m*. The 5 reappears in other relations to such framework.

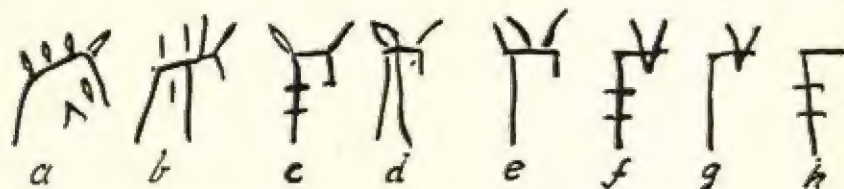


FIG. 774. CONVENTIONALIZED 'HORSE' SIGNS AND TRANSITIONAL FORMS.

The tablet with the six heads must at least have referred to a score or so of horses, perhaps not yet trained for use in harness. So, too, on tablets of another class we see the conventionalized 'horse' sign grouped with others relating to herds and flocks of animals.¹ The animals referred to in Fig. 773, therefore, may have been still in their pastures.

Something has already been said of the curious process by which the more or less pictorial horse's head sign is transformed step by step till it assumes a conventional shape in which no one ignorant of the intervening stages would have recognized the prototype.

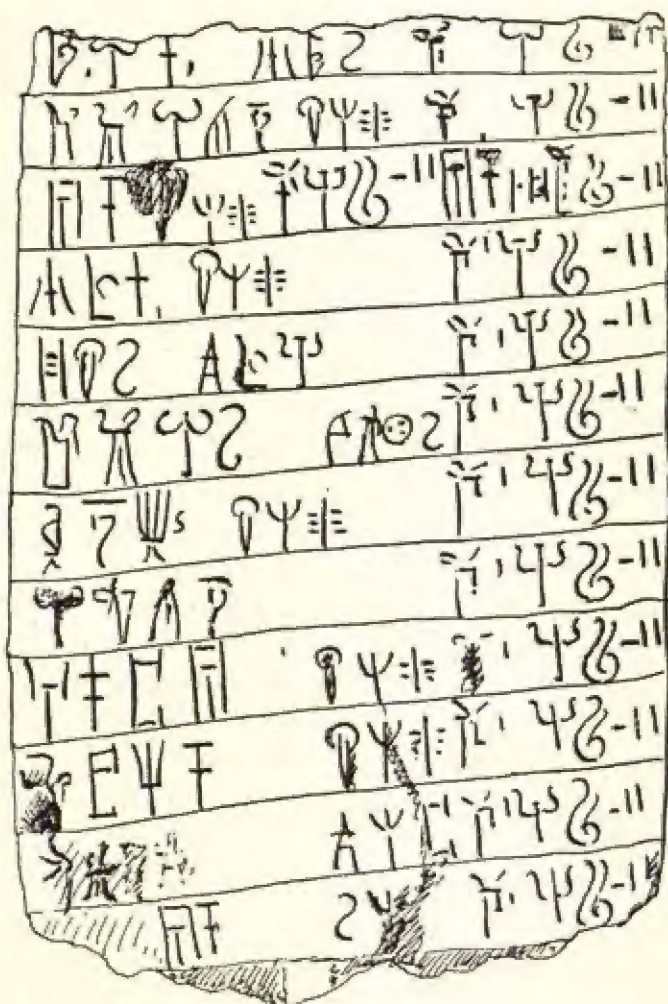


FIG. 775. TABLET SHOWING 'HORSE' SIGN REPEATED.

¹ See above, p. 722.

Some of the characteristic stages in this process of evolution are given in Fig. 774. The reduction of the neck to a single upright support is effected in conformity with that already noted in the case of the other domestic animals—oxen, sheep, and swine—listed on these clay documents.¹ The bars that often appear belong to the same system, and in the two-legged type, *d*, we may recognize, as in the other cases, an indication of the feminine sex. Otherwise the fixed element in these angularized and simplified signs is the ear, or one of the separate locks, and the forelock above the forehead, which themselves finally coalesce into a V. It is worth observing that, as already noted,² this conventionalized 'horse' sign recurs in name-groups,³ recalling the many Greek names beginning with Hippo-. In the Anatolian group, with which Crete is so intimately associated, the Carian word for horse has been recorded as *ala*.⁴

Horse's
head sign.

On the tablets of the present series, connected with chariots, type *c* is of frequent recurrence, often, as we have seen, coupled with the 'saw' sign as the equivalent of the chariot.

On a series of tablets⁵ we find these and the other abbreviated forms preceded (often after the initial name-group, written large) by 𐀀𐀁 in smaller characters. The number of horses referred to in this series is consistently 6, but in one instance the comparatively high figure of 40 is given. In the 12-lined inscription of Fig. 775,⁶ probably almost complete, similar horse signs are repeated twelve times before the group 𐀀𐀁, the last sign of which—only found on this tablet—somewhat recalls the Egyptian hieroglyph 𐀀 (*awh*), a coil of the rope used for field measurement, of 100 cubits, and thus as the numeral 100.⁷

'Fodder' Sign on Chariot Tablets.

Preceding the above conventionalized horse's head sign, and the equally conventionalized 'saw', indicative of the fabric of the chariot itself, there often appears, at the end of a herd-group, an otherwise familiar character consisting of a circle enclosing dots or dashes, varying in number from two to four (Fig. 776, *a-e*).

In some cases it is seen with a looped excrescence (Fig. 776, *f, g*) which

¹ See above, p. 722, Fig. 706 and Table, B. 92, 93.

² See above, p. 711.


³ E.g. 𐀀𐀁𐀂 and 𐀀𐀁 in large characters at the beginning of the inscriptions.

⁴ See p. 799, n. 3.

⁵ In my hand-list Nos. 50 *c* seqq., 59, 417, 637, 672, 682.

⁶ No. 903 in my hand-list.

⁷ F. Ll. Griffith, *Hieroglyphs*, Pl. VII, 86 and p. 43.

connects it with the ordinary 'flock' sign , specifically, representing goats. It is a reasonable conjecture that this sign relates to the fodder of animals, and may be compared with the Egyptian hieroglyph *sp-t* designating the corn on the threshing floor, and so 'corn' generally.¹ In its

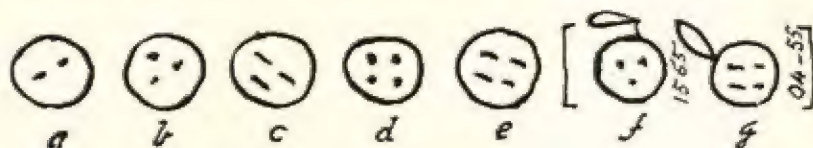


FIG. 776. FORMS OF 'FODDER' SIGN.

early pictorial form the shape of the grains is preserved (Fig. 777); these are finally reduced to four spots within a circle, Fig. 778, *b*, like Fig. 776, *d*.

From the association of the Minoan sign with cattle, and on the present series with horses, it may be taken to refer to the feeding of animals. It is

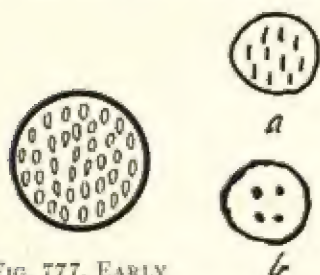


FIG. 777. EARLY PICTORIAL FORM OF EGYPTIAN SIGN (CORN ON THRESHING FLOOR).

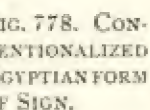





FIG. 778. CONVENTIONALIZED EGYPTIAN FORM OF SIGN.

used both as an ordinary phonetic character, and in an ideographic sense. In many cases it is inserted at the end of word groups as a determinative relating to their functions. That among the duties imposed on the 'knights', whose corslet badge appears on the 'chariot tablets', was included the care and feeding of the horses in the royal stables, is clear from the appearance in certain cases of the  sign on their cuirass badge. Examples of this are given above in Fig. 763, *h, k*: on *h* the 'corslet' is followed by a separate rendering of the

same character. On some of the tablets from the 'Armoury' Deposit (as a supplement to the somewhat larger sign-group that seems to represent the personal names) there is repeated what appears to be an official title beginning with the 'throne and sceptre', and ending with the 'fodder' sign ( ). On a specimen where the inscription seems to be practically complete, this group—presumably representing an official title—is repeated four times.

¹ F. Ll. Griffith, *Hieroglyphs*, pp. 27, 28, Pl. III, Fig. 32 and Pl. VII, Fig. 87 (reproduced here Fig. 777 *a*). A threshing floor (*ἀλώνιον*) of the same type as that so wide-

spread still throughout Crete was observed by me in a Middle Minoan settlement at Hellenikā, near Krasi. It was surrounded in the same way by a ring of stones set on end.

The 'Corslet' or 'Breast-plate'.

That the chariots depicted on the tablets were War chariots is proved by a continually recurring feature above referred to, with which they are associated. This object is clearly a corslet or breast-plate of a simple form. As may be gathered from some of the types given on the tablets on Fig. 763, and the generalized versions here shown in the inset (*a, b, c*), it seems to have consisted of horizontal plates of metal, probably backed by leather, covering the body and suspended from the shoulders by curved pieces, doubtless also of bronze.¹ A corslet which seems to have had shoulder-pieces like short sleeves is seen on a fresco fragment from Mycenae, worn by a warrior standing beside a horse (Fig. 779).²

Examples of the corslets worn by the Egyptian soldiers of Rameses II in his campaigns against the Hittites, though a century later in date, display a great similarity with those of the 'Chariot tablets'. This is well shown in the inset *d*.³ A contemporary example of an Egyptianizing type of this kind is also



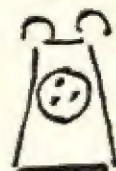
FIG. 779. FRAGMENT OF PAINTED STUCCO SHOWING WARRIOR BESIDE HORSE WITH SHORT-SLEEVED CORSLET; MEN'S MEGARON, MYCENAE.



a



b



c

supplied by the body armour of the Shardana mercenaries (Fig. 780), though the cuirass is there



d

fastened at the side. The horizontal plates and the shoulder-pieces so characteristic of those of the Knossian characters are also here in evidence. We may see in this, indeed, another illustration of the strong Egyptian influences at work in the last days of the Palace. The Minoan 'cuirasses' here

¹ In some cases we see a mere loop instead of a plate, and the material may well have often been leather. At times the shoulder-pieces

are indicated by detached curves.

² See 'Eφ. Αρχ.', 1887, Pl. II.

³ Rosellini, *Mon. Storici*, &c., Pl. CIV.

seen differ from the Egyptian in the gradual expansion from the summit downwards. They are also distinct from those worn by the 'Peoples of the Sea' and other invaders of Egypt in the days of Rameses III, with their riblike plates curving upwards on the lower part of the abdomen, and evidently set on a kind of leather tunic hanging from the shoulders without sleeves and without any trace of metal shoulder-pieces (Fig. 781). As has been noted, however, shoulder-pieces are seen, as well as horizontal metal bands, in the case of the much more elaborate armour of the Shardana. This, however, goes back to an earlier date, since they had been already employed as bodyguards in Rameses II's time.¹ Here, too, the cuirass shows horizontal bands, though the method of fastening along the right side is new (Fig. 780).

In late Cypro-Minoan Art of about 1300 B.C., as exemplified by the ivory relief of an Enkomi

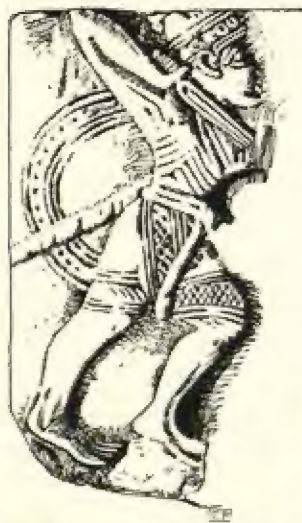


FIG. 782. WARRIOR WEARING CORSLET: IVORY RELIEF OF ENKOMI MIRROR-HANDLE.

mirror-handle, where a warrior attacks a Griffin with a short sword, the body armour with its up-curving ribs (Fig. 782) is that of the Akhaiusha, Pulasati, and other invaders of Egypt of Rameses III's time. In any case we may assume a leather tunic below, to which the metal bands were applied. The number of the curved bands was, in this case, five; the highest number of horizontal plates of the cuirasses figured on the tablets is six.

It is tempting to recognize in this Cypro-Minoan type—that was also proto-Achaian—the original of the highly elaborate breast-plate, in this case of



FIG. 780. SHARDANA WITH CORSLET AND SHOULDER-PIECES.

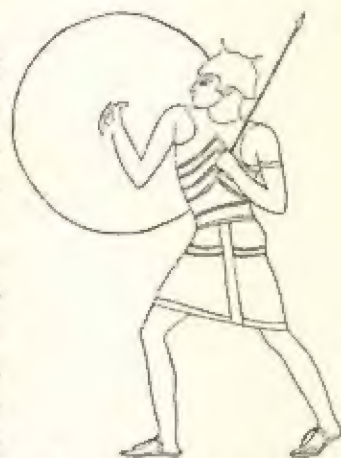
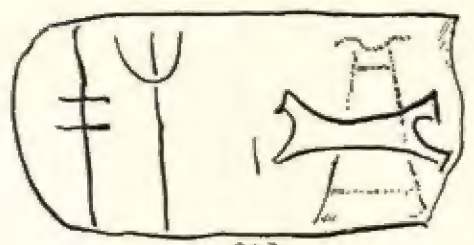


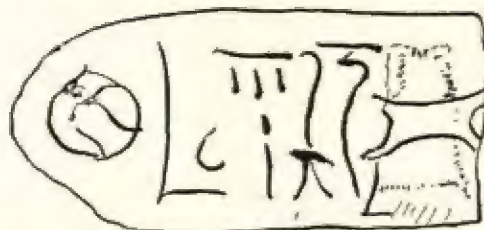
FIG. 781. WARRIOR OF 'PEOPLES OF THE SEA'.

¹ Rosellini, *op. cit.*, Pl. CI. In W. Max Müller, *Asien und Europa*, p. 374, the armour of the 'Peoples of the Sea' is set beside this.



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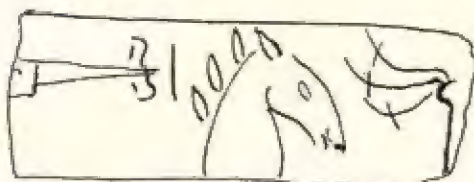
a



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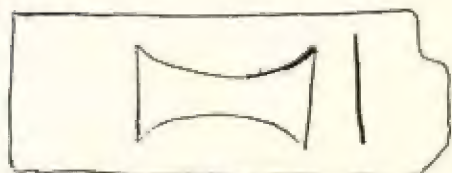
b

FIG. 783 a, b. SECTIONS OF TABLETS SHOWING 'INGOT' SIGN SUBSTITUTED FOR CUIRASS.



225a

a



225b

b

FIG. 784. a, END OF NORMAL 'CHARIOT' TABLET'; b, BACK OF SAME TABLET WITH 'INGOT' SIGN INSERTED.

tin, with inlaid bands of gold and *kyanos*, which King Kinyras, according to the *Iliad*, sent to Agamemnon when about to sail for Troy.¹ In this case we are directed to an orientalizing source as represented by Cyprus rather than to the Minoan home-lands.

As to the material of the 'corslets' on the 'Chariot tablets' a sidelight may be gained from a curious detail observable in several cases. It is suggested above that this class of clay documents represents warrants for the supply of certain objects—in this case a full 'knight's' equipment, chariot and horses, with their fodder, and, for himself, a breast-plate. Sometimes, apparently in place of this an 'ingot' sign is inserted after the chariot. Not only has the breast-plate been in certain instances erased, but on two examples the 'ingot' sign has been actually substituted for the original corslet, itself traceable beneath (Figs. 783, a and b).

In other words, the right to receive the ready-made article was commuted for a bronze talent. In some cases, again, we see the cuirass omitted and an ingot set in its place, or on the reverse side of the tablet as originally inscribed (Fig. 784, b). It is reasonable to suppose that the amount of bronze in the ingot (nearly 30

Part of full 'Knight's' equipment.

Bronze talent shown as equivalent.

¹ *Il.* xi, 19 seqq. There were 10 bands or stripes (*olmoi*) of 'black' *kyanos*, 12 of gold and 20 of tin, from which Helbig concludes that the gold and *kyanos* bands were inlaid in a tin sheet, the outer margin being gold.

He would divide the whole into 21 bands in front and the same behind (*Hom. Epos* (1887 ed.), pp. 382, 383). The point to be noted is that in this case we must assume strips of inlay and not separate plates or 'ribs' of metal.

kilogrammes, as we have seen, or 66 pounds) was large enough to leave a good surplus for the armourer's work. In some cases the 'cuirass' is followed by II, showing that a pair was to be supplied; one, possibly, for the driver of the car.¹

Ideographic Signs on the 'Corslet': Badge of the Royal Cup-bearer.

Signs on
Corslets.

Certain linear signs—in this case used ideographically—appear on the corslets: ☺, the most usual, speaks for itself, implying that the officer was entrusted with the feeding of the horses. The λ , which also occurs,

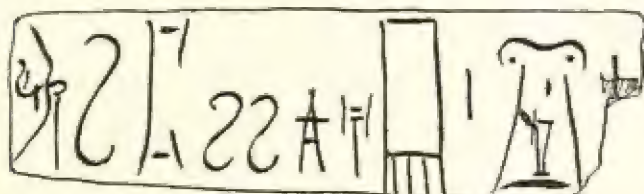


FIG. 785. PART OF 'CHARIOT TABLET' SHOWING CORSET MARKED WITH 'CUP' SIGN.

has been shown above to connect itself with certain vessels. The 'Cup' sign ∇ , of which examples also appear in this position—elongated as in Class B—(Fig. 785), recalls the shape of the long, pointed

vessel held by the Cup-bearer of the fresco.

Cup sign
of official
'Cup-
bearer'.

As a matter of fact this sign is seen alternating, in a separate position, with the 'throne and sceptre', and clearly standing as the mark of a high Court official. On the corslet, it may well be regarded as the badge of the royal Cup-bearer. It is, indeed, to be observed that this 'cup' sign, following the 'throne and sceptre' appears on a series of tablets before numbers indicating, it would seem, the quota due to a high functionary, of whom this was the official badge.

It is hardly necessary to recall the high position of the officials bearing this title—the equivalent of the Medieval *Pincerna*—in Egypt and the great Eastern Monarchies. A trace of its importance in the heroic Age of Greece is still reflected in the cup-bearing functions which, already in the *Iliad*, are attributed to Ganymedes. For the warlike services performed by such an official we have only to recall the case of Rabshakeh, the 'Chief Cup-bearer' of the Assyrian king, who was also a leader of the host.

The appearance of the 'fodder' sign on the series of corslets already mentioned offers an apposite parallel. It is well known that among the Germanic invaders of the Roman Empire the official in charge of the royal

¹ See Erman, *Life in Ancient Egypt* (Engl. ed.), p. 548.

horses and stables occupied a high position. As *Mariscalcus* in its Latinized form the title lives on in that of 'Marshal'. The 'Comes Stabuli' Count of the Stables, on the other hand, was the lineal ancestor of the 'Grand Constable' of France.

The 'Whip' Sign on the 'Chariot Tablets'.

It cannot be doubted that the 'whip' sign, which appears on several

'Whip sign.

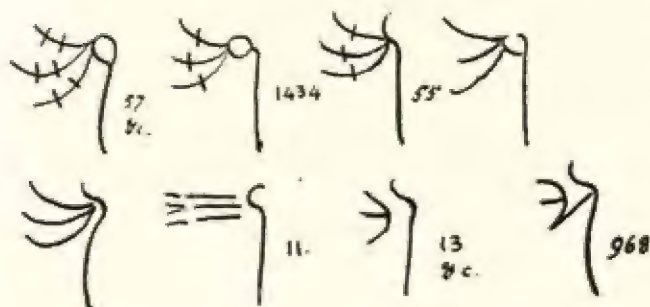


FIG. 786. TYPE SERIES OF 'WHIP' SIGN.

of these tablets (e.g. Fig. 784, a), refers to the actual driver or charioteer, who, as we learn from the example of contemporary Egypt, may himself have been a person of consequence.¹ It is seen with two thongs on the Avdu ring, illustrated below in Fig. 803, while on the

Vapheio gem (Fig. 799) there are traces of three thongs. Both as an ideograph and with an ordinary phonetic value, the 'whip' sign 𐀓 first makes its appearance in Class B, which covers the period when chariots first came into general vogue with the Knossian lords. A type series illustrative of the evolution of this sign is given in Fig. 786.

First Appearance of Wheeled Vehicles in Crete.

There were few districts of Crete where, even in the height of summer, chariot driving could have been really practicable without the existence of a made track. In the Central region, parts of Pedeadá—the Omphalian Plain, east of Knossos—and the more considerable level of Mesarà to the South, might at times be suitable, but wheeled traffic had originated under much more favourable conditions on the Mesopotamian plains, where vast spaces were available for it throughout the hot season.

First appearance of wheeled vehicles in Crete.

The discovery of a model clay wagon with polychrome decoration in the M. M. I a style at Palaikastro² (Fig. 787), described and illustrated in the

Miniature wagon from Palaikastro.

¹ See Erman, *Life in Ancient Egypt* (Engl. ed.), p. 548. Sons of Rameses II and III were 'chief charioteers of his Majesty and superintendents of the horses'.

² *P. of M.*, ii, Pt. I, p. 156 and Fig. 78; See R. M. Dawkins, *B.S.A. Suppl. Paper 1*: unpublished objects from the Palaikastro Excavations.

Second Volume of this work, is all the more remarkable since its date—not later than the close of the Third Millennium B.C.¹—shows that wheeled vehicles had already existed in Crete before the days when Hammurabi reigned in Babylonia. The appearance here of this earliest of European

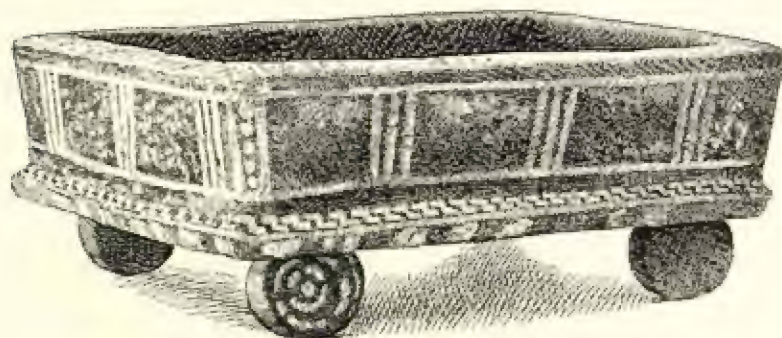


FIG. 787. MODEL CLAY WAGON FROM PALAIKASTRO, WITH M.M. Ia POLYCHROME DECORATION.

wagons—so like a modern railway truck in build—at that distant epoch supplies a new commentary on the wave of Oriental influence that seems to have reached these shores as a not remote

consequence of Sargon's Conquest of the 'Western Land'. It was three or four centuries at least earlier than its first recorded appearance in the Nile Valley,² which was also doubtless due to Oriental influence.

A simple kind of truck, with four solid wheels supporting a flat platform, is the earliest known Egyptian form. By Amenhotep I's time, however, about the middle of the sixteenth century B.C., a two-wheeled war-chariot is depicted of the typical Pharaonic kind and supplying the first known example, either in Egypt or elsewhere, of the four-spoked wheel.

On the early polychrome car—itsself of the domestic class—from Palaikastro there is no trace of a pole, but the wheels, as shown by its reproduction here in Fig. 787—though the effect of the painted design must not be too literally interpreted—seem to illustrate a transitional form which has the appearance of three concentric circles, one to hold the axle end (the

¹ Prof. Dawkins observes (*op. cit.*, p. 17) that the wagon 'is certainly not later than M. M. Ia and may, very likely, be as early as E. M. III'.

² The earliest Egyptian example is supplied by the wheeled platform supporting a sacred boat painted on a wall of a tomb at El Kab belonging to the very beginning of the New Kingdom (J. J. Tylor, *Qu.*, 1900). It is four wheeled, the wheels consisting of

small solid disks, and a track is prepared by means of cross-pieces of wood, laid at short intervals on the, presumably, sandy ground. Another painting, in a tomb of the same cemetery of Amenhotep I's time, round about 1550 B.C. (J. J. Tylor, *Tomb of Renni*, Pl. II) shows a two-wheeled chariot, the predecessor of the ordinary Egyptian class. The wheels, so far as can be gathered from their painted designs, had four spokes.

axle being probably fixed), and cross-bars suggestive of four spokes. The next example of a Cretan four-wheeled cart is found—*longo intervallo*—on the inscribed tablet of Class A from Tylissos, already illustrated, the chassis of which (Fig. 769 above) shows two small four-spoked wheels in front and larger disks of solid wood behind.

The Chaldaean Origin of Wheeled Vehicles : the Primitive Type (A).

It is to the Mesopotamian plains that we have to look for the earliest known wheeled vehicles. Both at Ur and Kish—where the clay models

Chal-
daean pro-
totypes of
Chariots.

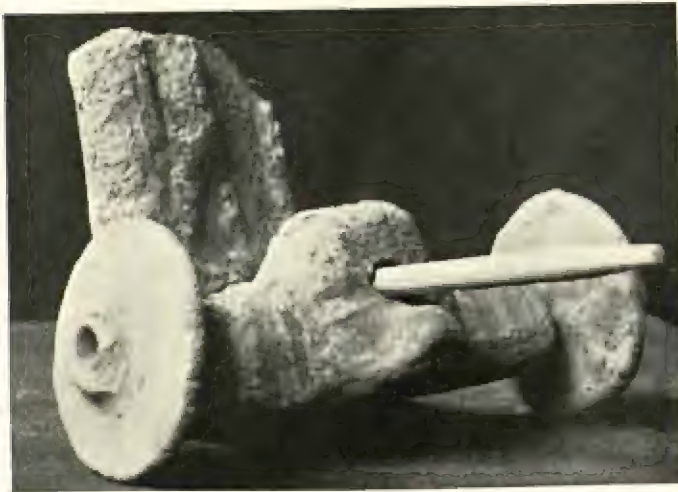


FIG. 788. CLAY MODEL OF PRIMITIVE CHALDAEAN CHARIOT OF TYPE A, WITH ROD INSERTED TO ILLUSTRATE THE POLE RUNNING OUT FROM FLOOR-LEVEL.

supply a good deal of rough material—the four-wheeled type seems to have been prevalent, though two-wheelers were also used, especially it would seem, for War.

In the primitive type the pole ran out more or less on a level with the floor of the 'box', ascending thence in an easy curve to the yoke. In the small clay model from Kish (Fig. 788),¹ where the figure

of the charioteer is moulded in relief against the back, a hole is visible in the lower part of the front into which the clay pole was fixed, its first section being here represented by a wooden rod. The pole continued above the floor to the back. The front when complete is high, for the charioteer's protection, and attached to it there appears on several of these clay models a case for bows and arrows.

This most primitive kind of car or wagon—which may here be conveniently referred to as Type A—seems to have been in general use in the

Primitive
Mesopo-
tamian
Car :
Type A.

¹ In the Ashmolean Museum, from the Oxford and Field Museum Excavations 1928-30. A full account of the discoveries at Kish by its excavators, Professor Langdon and Monsieur Watelin, will shortly appear. Much

useful information regarding the present subject, including his own illustrative materials, have been kindly submitted to me by Professor Langdon.

period covered by the earliest Mesopotamian strata. A good idea of one in action may be gathered from the cylinder, Fig. 789, from the 'prediluvian' level at Kish.¹ The pole here springs out at a gradual incline from the base-line of the vehicle and then runs almost level to the necks of the



FIG. 789. CYLINDER WITH CHARIOT SCENE: PRE-FLOOD STRATUM, KISH.

Chariots
on War
panel of
'Stand-
ard' at
Ur.

Draught
animals,
Oxen and
Asses.

more detailed presentations of the subject on the War panel in brilliant mosaic inlay on the 'Standard' from a Royal Tomb at Ur (Fig. 790).² Here we see the same javelin holder set on the front, while the reins drawn over the front border are made to pass through the characteristic rein-rings (of which specimens were found) on their way to the heads of the animals. The rein-rings and the whole front of the chariot,³ by a curious device of early perspective, are shown facing, and indeed the second wheel probably belongs to the farther side. The animals are here clearly defined by their ears and tails as belonging to the same breed as the Onager or 'Wild ass' still found in this region in a wild state. On the 'mascot', indeed, of Queen Shub-ad's 'sledge chariot' is placed a finely modelled electrum figure of the same animal, while on another similar object appears an ox, alternatively used for Sumerian wagons.

In tombs at Kish and Ur slaughtered teams of both classes of animals were brought to light. The horse—the 'ass of the mountain'—had hardly entered on the scene, its arrival being generally connected with the Kassite conquests during the first quarter of the Second Millennium, B.C.⁴

¹ *Oxford and Field Mus. Excav.*: Ashmolean Museum.

² The short horizontal lines above are probably the backs of the other animals.

³ C. Leonard Woolley, *Ur Excavations*, vol. ii; *The Royal Cemetery*, p. 61 and pp.

266-72: Pl. 92.

⁴ Mr. Sidney Smith, Keeper of Assyrian antiquities in the British Museum (where the 'Standard' is preserved) kindly pointed this out to me.

⁵ See especially, L. W. King, *History of*

It is certain that the chariots that Egypt borrowed early in the XVIIIth Dynasty were horse-drawn.

On a projection at the back of these chariots stand warriors holding javelins and axes of the early Chaldaean form. The solid wheels are here



FIG. 790. MOSAIC ('STANDARD') OF UR, WITH WAR CHARIOTS.

seen to be 'built up of two semicircles of wood fastened together by cross tenons with projecting hubs through which comes the axle end'—the axle itself being apparently fixed, the wheels alone revolving.

Two Main Methods adopted (B and C) to improve Adjustment of Pole and Car.

Here, as in other cases, there is no clear evidence of a further structural member linking the pole with the chariot box. It will be seen, however, that some more effectual hold was early found desirable, both to lighten the pressure on the pole and to secure a better balance for the car.

There were two methods by which this improved adjustment of pole and chariot box were mainly effected, and they are both illustrated by the two distinct classes of Minoan cars. The most obvious plan (here referred to as Type C) by which the fore-end of the pole is attached to the upper part of the box, though very prevalent later—as in Homeric Greece—does not seem to find any illustration in early Chaldaean usage. The other device, however—much more radically divergent—where the pole is made to run up abruptly along the front of the box to which it is lashed at

Chariot
Type B:
Pole run-
ning up
box.

Babylonia, p. 215 seqq., and cf. *J. H. S.*, xxx, p. 359. For the first mention of the horse see A. Ungnad, *Orient. Literatur-Zeitung*, 1907, p. 638 seqq., who publishes a letter of Hammurabi's time, ordering corn for horses.

Mr. Sidney Smith, however, seems to be justified in his opinion that the very early vase from Khafaje, in the B.M., where a chariot scene is depicted, shows horses. This he regards as considerably earlier than the Ur 'Standard'.

the point where it arches forward, is seen to have been almost as early current as A among the Sumerians themselves. This method—Type B—is also generally followed, as we shall see, by the earlier class of Minoan chariots.

**Chariots with Pole rising up in front of Box and lashed to its Top
(Type B): Royal Sumerian Examples.**

Sumerian
chariots
of Type B.

The 'Stela of the Vultures'¹ set up by the Patesi Eannatum² at Lagash (Tello) early in the Third Millennium B.C.—till quite recently the chief existing source for the early Mesopotamian chariot form—was unfortunately recovered in a very fragmentary state. Although, however, the evidence was somewhat obscured by a primitive attempt at perspective, a comparison of the larger section of the chariot scene, Fig. 791, with two other fragments,³



FIG. 791. FRAGMENT OF 'STELA OF THE VULTURES' SHOWING
PART OF SPRING OF CHARIOT POLE.

clearly shows that the spring of the pole at the point where it begins to arch forward, is attached by some kind of band to the upper part of the box front, with which, indeed, its lower part seems to be united.

¹ De Sarzec et Heuzey, *Découvertes en Chaldée*, i, Pl. iii bis, E. 1, and the further fragment, Pl. iv ter. F. 2. See, too, *Restitution matérielle de la Stèle des Vautours* (Léon Heuzey: *Restitution Archéologique*, Pl. II, E).

² L. W. King, *Sumer and Akkad*, 120 seqq. and Appendix II, Table I.

³ Heuzey, *Restitution matérielle*, &c., p. 21. In his otherwise useful *Restitution Archéologique*, however, chariots of the other class with the pole running out from the level of the floor, including a model Syrian bronze car of later date, are used for comparison, pp. 16-18 and 20.

Happily, Mr. Woolley's excavations at Ur have since brought out a complete version of the royal Sumerian form.¹ The typical character of this, moreover, is now demonstrated by the discovery at Khafaje (about



FIG. 792. ROYAL SUMERIAN WAR CHARIOT DRAWN BY FOUR ASSES, FROM UR RELIEF COMPLETED BY THAT OF KHAFAJE.

15 miles East of Baghdad) of an alabaster votive tablet² showing the foreparts of animals and trappings belonging to a representation of a war chariot evidently so closely similar that the heads of the driven team of four asses serve, as shown here in Fig. 792, to complete the Ur relief.

The practical identity of these examples—one from the Northern region East of the Tigris, the other from the extreme South of Mesopotamia, near the Euphrates—warrants the conclusion that we have here true records of the chariot type in general use among the Chaldaean dynasts round about 3000 B.C.

That this B type of chariot with the initial section of the pole linked to the box front persisted in Mesopotamia to the Age of the Sargonids is attested by cylinder types of that date. Three curiously parallel cylinders,³

Persistence of Type B on Chaldaean side.

¹ *Antiquaries Journal*, viii (1928), Pl. V and IX; (1929), Pl. II.

² *Tell Asmar and Khafaje: the first season's work in Eshnunna* (1930-31), by Henri Frankfort, Thorkild Jacobsen, and Conrad Preusser, p. 96, Fig. 44. Dr. Preusser has rightly called attention (*ib.*, p. 97) to the

astonishing likeness to the Ur sculpture.

³ One of these, in the Metropolitan Museum at New York, was figured by W. Hayes Ward, *Am. Journ. of Archaeology*, ii, p. 160, Fig. 1, and cf. his *Seal Cylinders of Western Asia*, pp. 48, 49, where to this is added another similar type (No. 126). Another similar

one of them from a tomb of that date at Ur, depicting chariots reluctantly drawn by the harnessed Dragon, show the pole arching up from the front in this way. The type, therefore, was in being at the time when the first direct connexions were opened out between the Mesopotamian Power and the East Mediterranean basin—connexions, as we have seen, that intimately affected the cultural history of Minoan Crete.

Diffusion of Royal Sumerian Chariot (Type B), with Initial Section of Pole linked to the Front, to Hittite Regions.

Diffusion
of Type B
in Hittite
regions.

The survival of this 'Royal Sumerian' form of chariot with its frontal



a



b

FIG. 793 a, b. HITTITE RELIEFS FROM MALATIA, SHOWING CHARIOTS WITH POLES ATTACHED IN SUMERIAN FASHION (TYPE B).

attachment in the Hittite regions is well exemplified by two reliefs on plaques from Malatya, now in the Louvre (Fig. 793 a, b).¹ These depict hunting scenes in which Hittite princes

pursue, in one case a lion, in the other a stag. In these examples the pole of the chariot starts forward, either on a level with or actually from the edge of the top of the car-front. The wheels of both are 6-spoked, an advanced characteristic, but still far from the multiple spokes of late Assyrian chariots. The crossed quivers on the sides themselves suggest Rameside parallels. At the same time the pictorially hieroglyphic style of the inscriptions show that the monuments belong to

the pre-Assyrianizing Hittite period.

Another Hittite relief of more or less contemporary date from Sendjirli²

cylinder from a Sargonid grave at Ur has been now published by Mr. Woolley (*Ill. London News*, March 17, 1934, p. 403).

¹ G. Contenau, *Manuel d'Archéologie*

Orientalis, iii, pp. 1130, 1131, Figs. 744, 745.

² In the Berlin Museum. Cf. Contenau, *ib.*, p. 1155, Fig. 761.

shows a practically identical form of chariot, here again with six spokes (Fig. 794). Somewhat later, on an eighth-century relief from Sakje Geuze¹—to the accompaniment of 8-spoked wheels and the Assyrian winged solar emblem—we see a lion hunt, where the chariot apparently approaches Type C, with a curved appendage beneath an upper thong—the pole itself rising from the base of the chariot. This form is usual on late Assyrian Monuments.

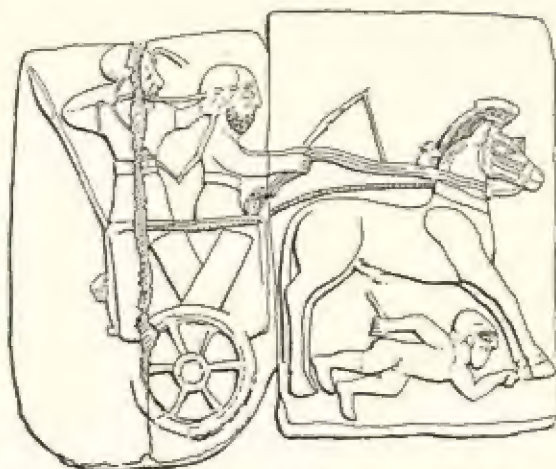


FIG. 794. HITTITE RELIEF, SHOWING WAR CHARIOT, SENDJIRLI.

Spread of Chariot Type B to the Aegean Area.

In the Aegean area the evidences of the survival of the early Sumerian chariot form Type B go back considerably earlier than the Ramesside epoch to which the Hittite examples belong, and some may well be dated at least to the first half of the Fifteenth Century B.C.

Appear-
ance
of Type B
in Aegean
area.

On an amygdaloid sard bead-seal in the British Museum²—an early find on the site of Knossos—a charioteer with a double-thonged whip is seen driving a two-wheeled chariot the pole of which (decorated with the usual angular appendages) rises from the summit of the car-front (Fig. 795). These appendages cannot be regarded as cross-pieces joined to a pole below, since, in each case, they come to a point above the line of the horses' backs. So, too, on many of the chariot frames of the tablets where there is a connecting rope above the pole, the festoons that hang from it either terminate before they reach the line of the pole or run down beyond it (see Fig. 800). Another bead-seal of similar elongated amygdaloid form and material, from the Vapheio Tomb,³ shows a more rudely executed

¹ Garstang, *Land of the Hittites* (opp. p. 104).

² *Catalogue of Gems*, by H. B. Walters, Pl. I, No. 39, and p. 5 (presented by A. W. Franks). See, too, Furtwängler, *Antike Gemmen*, Pl. ii, 9 (Vol. ii, p. 8); Perrot et Chipiez, vi, p. 845, Fig. 428, 2; and Imhoof-Blumer und Keller, *Tier u. Pflanzenbilder*, Pl. XVII, 2

and p. 106. Mercklin, *Der Rennwagen*, &c., p. 11, cites another similar intaglio from the Hartmann Collection.

³ 'Eφ. 'Αρχ., 1889. Pl. X, 30. For this form and its L. M. I b date, see above, p. 493. It also occurs in gold (Thibé).

version of the same arrangement. It serves to date the Knossian intaglio within the limits of L. M. I *b* (c. 1500-1450 B.C.).

In connexion with the above it is specially interesting to observe that



FIG. 795. CHARIOT OF TYPE B ON AMYGDALOID BEAD-SEAL, FROM KNOSSOS.

Example
of type B
on Thisbê
bead-seal.

one of the group of three gold examples from the Thisbê find that fit on to this elongated amygdaloid form of bead-seal¹ illustrates a chariot of the same class in much more elaborate detail (Fig. 796). The intaglio itself is the pendant to another of the same group illustrating some early form of the Oedipus story.² In the fellow piece the hero is at grips with the Sphinx: on this we recognize him in the 'Cleft Way',³ attacking his father, known as Laios in the Greek version. The personage in the chariot—where superior rank is designated by the banded helmet with flowing crest—wears a sleeveless corselet with shoulder-loops analogous to those of the Knossian 'cuirasses'. The flounced and tasselled covering of the thighs are a characteristic of the whole group.

The third bead-seal of the group shows a scene that naturally suggests the murder of Aegisthos and Klytemnestra by Orestes. The occurrence in the group of two illustrations of the 'Oedipus' story⁴ finds a

¹ See above, pp. 513, 514, and compare p. 495, where this 'elongated' evolution of the 'amygdaloid' class is described, its antecedent stage being practically limited to L. M. I *a*.

² See above, pp. 513-15, and Fig. 457 *a*, *b*, and A. E., 'The Ring of Nestor, &c.', and

Sepulchral Treasure from Thisbê (J. H. S., xlv, 1925, and Macmillans), p. 27 seqq. and Pl. iii.

³ Σχιστὴν ὁδόν.

⁴ The absolute correspondence of the youthful hero in all three scenes of this group

suggestive parallel in the case of the engraved gold beads of the Third Shaft Grave at Mycenae,¹ one of which depicts a warrior stabbing a lion and another a lion wounded. It looks as if there may have been *catenas* of

Triplet of scenes on Thibê group.



FIG. 796. CHARIOT OF TYPE B ON GOLD BEAD-SEAL FROM THIBÊ TREASURE.

heroic subjects in the case of bead necklaces, some of the intaglios being strung together, so as to illustrate a continuous cycle.

All three of the large bead-seals of the Thibê group depict scenes of violent action. On this the horses have been brought to a sudden stop by the onslaught of the youthful bowman in front, and the head of the nearer horse is thrown back, thus concealing the end of the pole with the yoke. Here the pole, though we may suppose it to have run up from the base of the car, runs forward from its upper margin, and is joined by another solid piece connected by its upper framework, the two being bound together by a thong.² This arrangement, in fact, comes very near the

suggests, indeed, that we may have to do with some version of the saga in which Orestes and Oedipus were one and the same person.

¹ Schliemann, *Mycenae*, p. 174, Figs. 253, 255. Karo, *Schachtgräber von Mykenai*, *Atlas*, Pl. XXIV, 33, 34.

² Complete abstention from any engagement in outside controversy has been imposed on me as a condition of progress with this Work. This—not any want of courtesy—has prevented my dealing with adverse criticism till the points concerned had been reached by the text. The authenticity of the Thibê intaglios

has been already vindicated above in its crucial aspects (pp. 515, 516), but separate notice may be taken here of the attempt of Commandant Lefebvre de Noailles in an article in *Arethuse* (Ap. 1926, p. 63 seqq.), entitled *Sur quelques intailles attribuées à l'époque minoenne*, where the supposed falsity of the gold bead with the chariot scene is made the basis of a condemnation of the whole find. A simple statement of the views there expressed will perhaps suffice. The very existence of Chariot-type B, the long antecedent history of which has here been so fully illustrated, seems to have

chariot of the Ur relief. From this point the two elements that now constitute the pole are lashed together at intervals, while the usual angular festoons are suspended beneath the roped sections. The legs of the two



FIG. 797 a. CHARIOT OF TYPE B, WITH HORSES' TAILS CROSSING, ON CYPRO-MINOAN 'KRATER', ENKOMI.

horses are shown, as often on Cypro-Minoan vases, in sufficient perspective to distinguish the two animals, their tails crossing near their roots as on more than one Cypro-Minoan 'krater' (e.g. Fig. 797 a). This slight perspective is, moreover, extended here in a novel way to the wheels, the farther of which shows part of its outline.

The chariot box itself is of the simple square form that seems, like the form of pole here seen, to be of

Oriental tradition. As in the case of that given below, from a Vapheio gem, the interior of its framework shows a criss-cross pattern that clearly represents wickerwork. Wickerwork, indeed, has been recognized in the been quite unknown to him. Since, then, the engraver does not conform to Type C (familiar to the critic), in which the pole arches forward from the base of the car, and is joined to the summit of the front by a cord, the Commandant assumes that he had mistaken the cord for the pole. He even makes the sweeping statement that 'le timon de tout char antique était fixé à l'essieu (axle-tree) sous le plancher du char'. It is quite true, as he states, that the girth is here placed too far back for its proper relation to the yoke (here shut off by the horse's neck), but logical exactness can hardly be looked for in all details. The girth, indeed, is usually omitted, and does not occur on the early Oriental examples of chariots. The appendages of angular form are not misunderstood links between cord and pole, but are here the same festoons that hang from the pole on the Knossian intaglio (Fig. 795). The horses' tails, crossing near their roots, regarded here as another sign of falsity, are well authenticated by Minoan examples (e.g. Fig. 797 a). The slight perspective rendering of its legs (bor-

rowed, it is suggested, from Greek Fifth-Century coins!) is often found on Cypro-Minoan vases. The appearance of part of the outline of the second wheel, though an interesting novelty, conforms to this. On the contemporary chariot scene on the H. Triada sealing (Fig. 808 below), the fore-parts of the breasts and necks of the horses are reduplicated.

It is much to be regretted that the critic responsible for these observations should not have thought it necessary to examine the object itself, which has always been open to inspection. After a lifetime spent in the study of such material I can only say that no relic that I can remember has presented more undoubted evidences of antiquity, some of them—such as the minute holes worn in the gold casing—of a kind that no modern forger could imitate. (For the under-side of the gold bead see above, p. 516, Fig. 460, *k*, where the compression and indentation of the plate are of the same kind as in the other specimens from the hoard, shown in the figure.)

structure of some of the early Sumerian chariots and recurs again on those of Cyprus, Etruria, and 'Geometric' Greece.¹

The same arrangement of the pole running forward from the top of



FIG. 797 *b, c*. FRAGMENTS OF ENKOMI VASES SHOWING POLE ATTACHMENT OF TYPE B. THE HORSES HAVE RAMESSIDE 'PLUMES'.

the car-front—Type B of the present classification—also survived (side by side with C) in Cypro-Minoan vase-paintings of L. M. III *a* date (Fig. 797 *a*). Specimens in which the horse shows plumes of Ramesside fashion are given in Fig. 797 *b, c*. In *b* wisps or festoons hang from the pole. On the parallel fragment, Fig. 797 *c*, it has no appendages. In this case the side of the car is covered with a spotted ox-hide.

Type B in Cyprus (L. M. III *a*).

Type C: Later Minoan Chariots with Fore-end of Pole attached by Thong to Upper Part of Front: Common, later, on Assyrian Monuments.

It has been already noted that one obvious method of better adjusting the pole to the chariot-box was the attachment of its fore-end to the upper margin of the chariot front by a connecting member, usually, it would seem, a thong or stout rope, at times, a solid bar. This is the form represented on our 'Chariot tablets', the car-front with the pole and its supporting thong roughly forming an acute triangle. The war chariot of Assyria, through all its later history, is of this type, and though the Minoan examples known actually go back to a much earlier date, it might, on the face of it, seem improbable that chariots of the Upper Euphrates and the very homeland of all wheeled traffic should have owed their shape to an Aegean source. Still the intensive Minoan penetration on that side—daily becoming more apparent—must never be left out of count.

Chariot Type C with upper support to pole: type of tablets.

¹ Compare, for instance, Helbig, *Home-Etruscan grave, Corneto*; and pp. 138, 139, *rische Epos* (1887 ed.), p. 136 (Fig. 29), Figs. 32, 33, 'Dipylon' vases. Cypro-Phoenician; pp. 141, 142, Figs. 35, 36,

Type C as a Minoan Chariot Form.

General
Minoan
use of
Type C.

The form of chariot here classified as C seems to have made its appearance on the Aegean side as early as B. The first records there certainly go back to L. M. I *b*. One of these, in any case not later than that epoch, is the sealing, Fig. 808 below, from Hagia Triada, specially valuable for its modelling of the horse. It may be reasonably assumed also, though the upper line of connexion is not there visible, that the fragment, Fig. 798, on the silver 'rhyton' with the Siege Scene,¹ really belongs to the same class.



FIG. 798. FRAGMENT OF SILVER 'RHYTON' WITH 'SIEGE SCENE' SHOWING PART OF A CHARIOT.

Early
example
of C on
Vapheio
bead-seal.

But the fullest representation of this arrangement—in connexion with a chariot body of the earlier class—occurs on the sardonyx bead-seal from the Vapheio Tomb, Fig. 799,² where the associated pottery of the L. M. I *b* class fixes its date as not later than the early part of the Fifteenth Century B.C. The chariot box here, of sub-rectangular form with the lattice work on its side, affords a good parallel to that of the Thisbé bead, Fig. 796, and may also well have been constructed of wickerwork.



FIG. 799. SPEAR-HOLDING PERSONAGE IN CAR OF TYPE C: VAPHEIO TOMB.

The subject of this intaglio, as pointed out above, is of special interest, since the spear-holding personage here depicted in his car wears the long, winding robe of the Knossian Priest-kings.³

The driver—sketchily indicated—grasps the reins, but the whip in his other hand has three thongs, like those of our 'Chariot Tablets'. The thong shows the usual appendages, which have no relation to the pole.

¹ The fragment is illustrated by Reichel, *Homeric Waffen*, p. 143, Fig. 17 a, from which Fig. 798, above, is taken. It does not seem to be any longer in evidence. The reticulated rockwork on the 'rhyton' has been

compared (vol. iii, p. 90) with that of the L. M. I *b* example, with dolphins, from Pseira.

² From a sketch by Monsieur E. Gilliéron, fils.

³ See above, pp. 419-21.

Type C on Tablets—Associated with Later, 'Dual' Form of Chariot.

The form of chariot, however, that is usual on these Palace tablets differs from former classes dealt with in its 'dual' character (see Fig. 800). The outline of the 'chariot box' or 'body', as shown for instance on the Vapheio gem, is preserved, but a curved annexe is added, at times with a central gem, is preserved, but a curved annexe is added, at times with a central

'Dual' form of 'Chariot Tablets'.

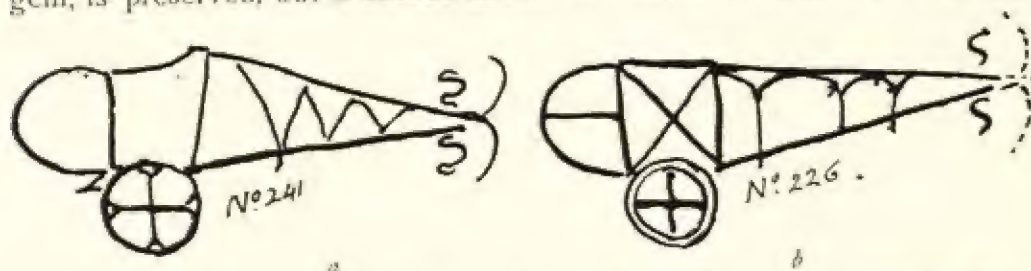


FIG. 800 *a, b*. TYPICAL EXAMPLES OF 'DUAL' CLASS OF CHARIOT, OF TYPE C: ON KNOSSIAN TABLETS.

bar,¹ like an arrow shaft in a drawn bow, Fig. 800, *b*. Sometimes there are three bars. The wheel, however, still centres with the front section.²

This 'dual' form is the distinguishing mark of the later type of Minoan chariot. It is still wanting in the earlier series belonging to Type B, which, like that on the Vapheio gem, are as a whole to be referred to the L. M. I *b* class and to the earlier half of the Fifteenth Century B.C. This arrangement, with a protruding curve behind, first makes its appearance on the tablets of the Linear Class B, representing the latest Palatial stage at Knossos, and its first appearance may be dated within narrow limits to 1450 B.C.—a chronological result of considerable value.

Henceforward, at Knossos itself and, apparently, in Mainland Greece, it is the invariable arrangement, though, as already observed, some survival of Type C is traceable in the Cypro-Minoan series. More rarely, as evidenced by the 'krater' from Enkomi showing the scales-holding steward,³

its general diffusion.

¹ See p. 788, Fig. 763 *a*, above. *f* shows three cross-bars.

² It is unfortunate that E. von Mercklin, in his otherwise useful work on 'The Chariot in Greece' (*Der Rennwagen in Griechenland*: Leipzig, 1909) has misunderstood the representations of this 'dual' type of the 'Chariot tablets'. He regarded the quadrangular section as an endeavour to depict the front of the chariot, the curved part supplying the side view (*op. cit.*, p. 16). This unwarranted inter-

pretation recalls the view, disproved by actual discovery, formerly put forward that the wings of the pillar shrines of Mycenae and Knossos were other sections of the structure seen sideways. It is true that a perspective rendering of this kind (with the farther wheel also included) occurs on the Ur standard. But such representations as Figs. 803, 804 are conclusive as to the Minoan 'dual' type.

³ Fig. 646, p. 659 above.

we notice the intrusion on that side of a special Syro-Egyptian adaptation of the pole, more or less intermediate between Types A and B of the present classification, in which it curves upwards from the base and is linked to the chariot-front by a short thong (Fig. 801.¹) It seems possible, indeed, that the addition of the rounded annexe to the square 'box' of the earlier

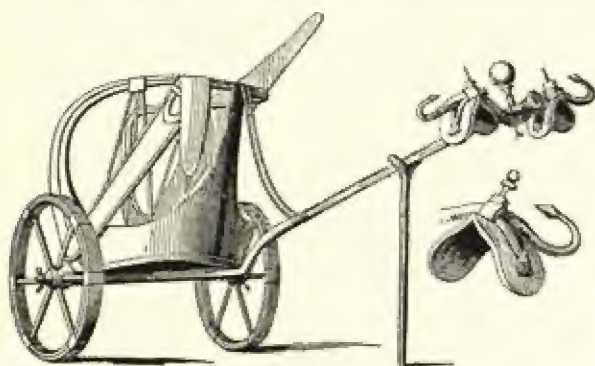


FIG. 801. EGYPTIAN CHARIOT OF RAMESES II'S TIME.



FIG. 802. RUTENU CHARIOT OF EGYPTIAN FORM, BUT WITH WHEELS FOUR-SPOKED.

Minoan form may have been suggested by the elegant curve of the light Egyptian chariots (Fig. 801) shared by those of their Syrian neighbours, and from which came also the curved back of the Minoan type. A typical specimen of a Rutenu chariot of Ramesside date is given in Fig. 802, which is indistinguishable from the Egyptian.²

The plumed head-stalls of some of the Cypro-Minoan chariot horses and details of the harness also certainly come from the same Egyptian side as the posterior bows of the chariots.

Curiously enough the most detailed Cretan presentation of the 'dual' form of chariot and its trappings shows it drawn by a pair of long-horned Cretan wild-goats in place of horses (Fig. 803). This version appears on an intaglio on a fine sardonyx ring cut out of a solid piece of agate, from a rock tomb at Avdu,³ in a glen situated in the rugged upland region that lies East

¹ From Wilkinson, *Anc. Egyptians*, i, p. 229, Fig. 61 (Thebes).

² *Ib.*, p. 30, Fig. 63.

³ The spot where the rock-tomb was found is locally known as 'στὰ Σπηλιόμια' or 'the Grottoes'. For this discovery, see, too, *Ring of Nestor*, &c., p. 36, n. 97. The ring itself passed into the hands of an Athens dealer and was purchased by an American Collector, from

whom I was later able to obtain it by exchange. A bad impression exists in the Candia Museum (Xanthudides, 'Εφ. 'Αρχ., 1927, p. 184). Mercklin, who refers to this, found the details unintelligible, but his description (based on a photograph of a cast of the bad impression) of the intaglio as 'von unerfreulich salopper Zeichnung' gives a very infelicitous idea of its strong, pure style.

Intrusion
of a Syro-
Egyptian
form in
Cyprus.

Avdu sig-
net ring:
chariot of
C type
drawn by
wild-
goats.

of the Dorian peak settlement of Lyktos. The principal person, seated behind the driver—holding the reins and a forked whip—seems to be laying his right hand (as seen on the ring itself) on the hilt of his sword.

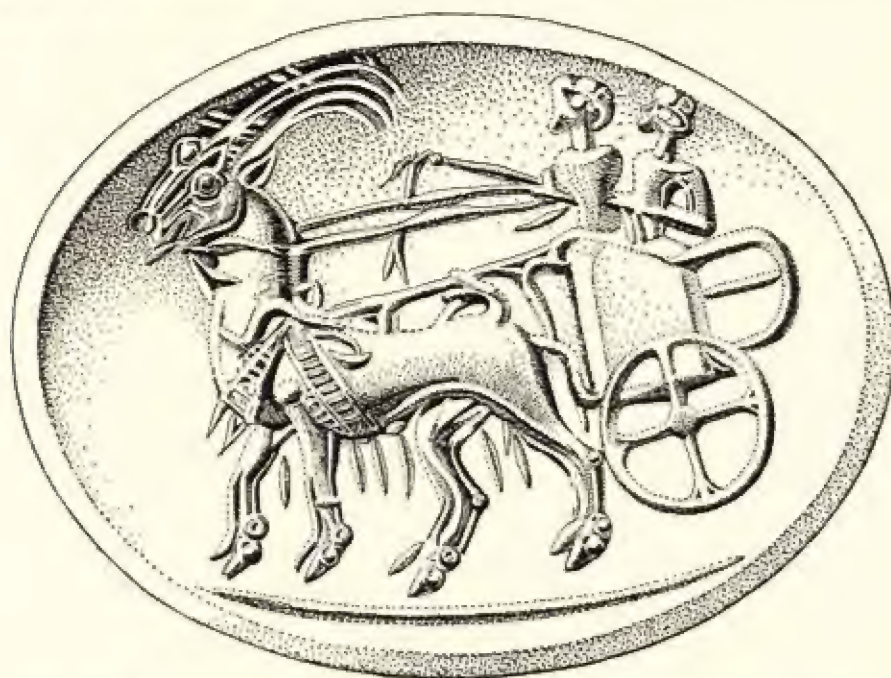


FIG. 803. CHARIOT OF TYPE C DRAWN BY CRETAN WILD-GOATS: ON SARDONYX RING FROM AVDU, NEAR LYKTOS.

That the Cretan *agrimì*, or wild-goat, should be used as an animal of draught is, of course, an impossible supposition. In the neighbouring tract, East of Lasithi, traces of a zigzagging Minoan paved way, supported by massive walling, may still be made out, climbing the steep path,¹ but a chariot, it might be thought, would be the last subject to be chosen by a local prince—whose stronghold lay amidst these limestone wilds—as his personal badge. Or was it, perhaps, a playful allusion to this very circumstance? The apparently human character of the personage holding the sword makes it difficult to regard this as a religious theme depicting a Minoan God in a chariot drawn by wild-goats, like that of Thôrr in the Edda.² The proper weapon of the Thunder-God would be a double axe. On the other hand, it is true that a female personage, who may well be the

Chariots
on H.
Triada
Sarco-
phagus.

¹ A. E., *A Mycenaean Military Road in Crete*. *Academy*, June 1, 1895.

² Grimm, *Deutsche Mythologie* (4th ed.), i, p. 153.

Minoan Goddess, is seen driving a team of Griffins on one of the end panels of the painted sarcophagus from Hagia Triada.

The horse was a novelty for Minoan artists, and sometimes came off

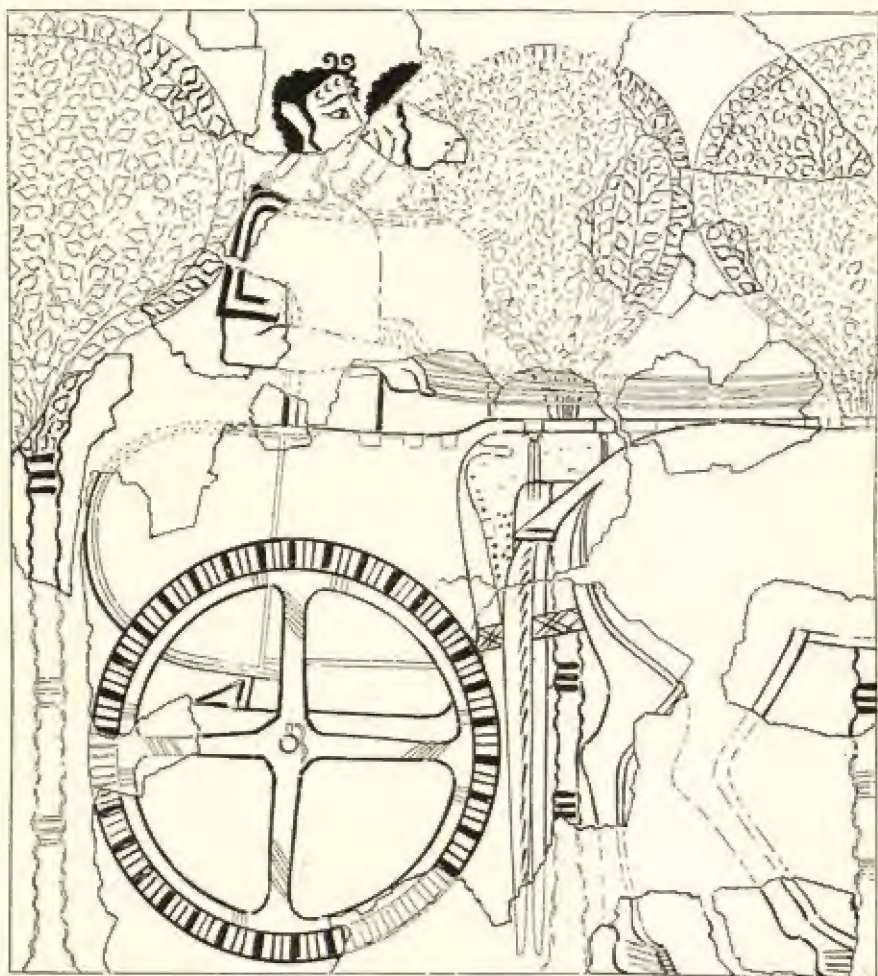


FIG. 804. TIRYNS FRESCO (HUNTING SCENE WITH LADY DRIVERS) SHOWING CHARIOT OF TYPE C WITH POSTERIOR BOW, AS ON THE KNOSSIAN TABLETS.

poorly. But the wild-goat had supplied the oldest exercises of Cretan engravers, and the powerful rendering of the subject in this work is one of its perfected results. The details of the harness are also well brought out, including the yoke, collar, and girth. In the older form of chariot, as seen on the Knossos gem, Fig. 795, and again on the Thisbê gold bead, Fig. 796, the girth is quite separate from the collar. Here, however, we see an improved development, both the collar and girth being brought

together above the horses' necks near the attachment to the pole—a converging method also found in later Assyrian and Persian examples.

A similar arrangement is visible in the end panel of the Hagia Triada sarcophagus, depicting the chariot and horses.¹ Unfortunately the front of the horses is largely defective in the Tiryns fresco, which like the sarcophagus belongs to the epoch directly following the date of the fall of the Knossian Palace. In other respects this illustration, taken from the stag-hunting scene of the later Palace there—as given in Professor Rodenwaldt's restoration²—supplies the best detailed view of the 'dual' form of chariot itself (Fig. 804). The wheels show an outer tire, wound round for extra durability, with what may have been wire and metal bands. The projecting point at the back of the floor is paralleled by some of the chariot designs on the tablets and by that on a Mycenae grave stela. The spring of the pole from the line of floor is clearly visible, and, above, what resembles rather a light rod than a thong running from the upper edge of the front. As in the case of other examples, little tassel-like appendages hang down from this. These, as we have seen, are clearly of a purely decorative nature, and do not imply any connexion between the upper element and the pole. In the case of the Avdu chariot, Fig. 803, where the appendages have at first sight a somewhat solid look, they are seen to hang down beneath the bodies of the wild-goats.

Dual
chariot
of Tiryns
Fresco.

This dual form of chariot belonging to Type C, which as we see makes its first appearance at Knossos about 1450 B.C., continued to be well represented in the two-wheeled class of the Greek Geometrical Period. On Dipylon vases the upturned ends of the chariot poles are joined to the frontal breast-work or *amphyx* by a rod or thong,³ and a similar arrangement survives in Archaic Greek black-figure vase-paintings. The Minoan form of chariot had, therefore, a vogue of about a thousand years' duration in the Aegean world. The elegant posterior curve and a certain duality of structure continued indeed to characterize Greek chariots of a still later Age.

Survival
of dual
chariots
of Type C
in early
Greek
Art.

¹ R. Paribent, *Il sarcofago dipinto di Hagia Triada*, Pl. iii (*Mon. Ant.*, xix).

² *Tiryns*, ii, p. 98, Fig. 40.

³ See Helbig, *Homerische Epos* (1887 ed.),

pp. 139, 140 and Fig. 33, and cp. *Ib.*, pp. 140, 141 and Fig. 34 (chariot of Zeus on the François vase).

§ 115. ARMATURE IN THE LAST PALATIAL AGE, CONTINUED: SEA-TRANSPORT OF THOROUGHbred HORSE; BOW, SPEAR, AND SWORD TABLETS, AND SEPULCHRAL MATERIALS.

Sea-transport of the thoroughbred horse; Large sealing showing horse on ship; Minoan transport vessels on seal-stones; Fine horses on sealings from H. Triada and 'Little Palace'—characteristic tufts of manes; Nose bands; Riding still unknown; Warlike associations of Chariots on Tablets—insertion of cuirass; Early appearance of horses on Mainland side; Galloping herd on Shaft-Grave blade; Tablets relating to manufacture of horn-bows; Semi-domesticated wild-goats; Horns also obtained by hunting; Earlier Cretan bow of Nilotic and Libyan type; Sealings and documents relating to arrows; Armoury' deposit, with Chests of arrows; Tablet referring to 8,640 arrows; The bronze 'arrow-plates'—their Mainland diffusion; Plates inserted in hardened wood points; Tablet relating to javelins and darts; Spears much used by Minoan warriors; Types of spear-head; Ring to encircle divided socket—Hektor's spear explained; L. M. II spear-heads at Knossos; Sword types of late Palatial Age; Rapiers with strong midribs—M. M. III a example; Shaft-Graves specimens; Zafer Papoura type; Evolution from dagger types; Kidney-shaped and oval openings of hilt-plates; 'Horned' sword of Goddess on seal-stone; L. M. IV 'horned' sword from Knossos; Later specimens from Zafer Papoura tombs; Dendrà specimen; 'Cruciform' sword type—characteristic of Late Palace; Evidence of 'Cruciform' type from late Chamber Tomb, Mycenae—perhaps of Knossian warrior; 'Cruciform' swords from Zafer Papoura; Deposit of 'Sword Tablets'; Part of crystal hilt found near; Royal Officer's name on 'Sword Tablet'; Tablet referring to store of 50 swords; Sword types on tablets—occasional 'leaf-shaped' outline; Great variety of sepulture at Knossos, but cultural contents uniform; No racial distinction in Tomb groups; Arms indiscriminately deposited in Tombs of various types; 'The Chieftain's Grave' relatively unimportant in size—a simple shaft grave; Rich Contents; Vessels for food and drink, mirror and hunting spears set above covering slabs; Gold necklace—Minoan sign of rank; 'Horned' sword; Cruciform sword with agate pommel and gold-plated hilt; On each hilt-plate two engraved scenes of lion hunting wild-goat.

Coming
of the
thorough-

CLEARLY an armada of chariots, whether for war or the chase, was essential for the prestige of the new dynasty of Knossos among contemporary

East Mediterranean rulers. But this further entailed the introduction of a breed of thoroughbred horses, such as the Island had hardly yet known.

Sea-transport of the Thoroughbred Horse.

An interesting record of their transport, here reproduced in Fig. 805, is the sealing showing a shapely figure of a horse superposed by the

Large sealing showing horse on ship.

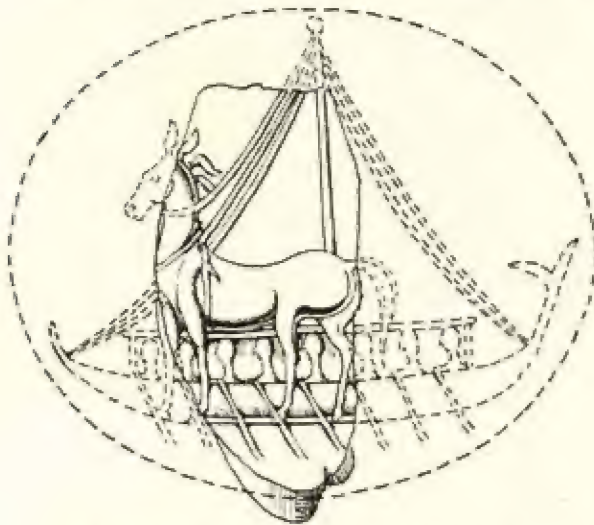


FIG. 805. MINOAN TRANSPORT VESSEL WITH FIGURE OF HORSE SUPERIMPOSED: CLAY SEALING FROM LITTLE PALACE, KNOSSOS ($\frac{2}{3}$). (SEE, TOO, *P. OF M.*, II, PT. I, P. 244.) ($\frac{2}{3}$)

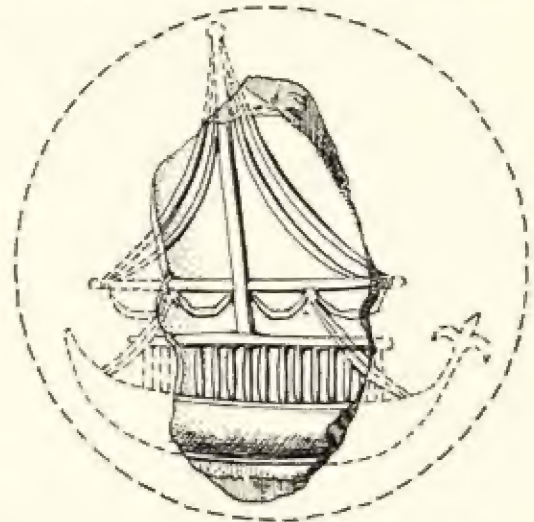


FIG. 806. SAILING VESSEL WITH DECK SHELTER: ON CLAY SEALING FOUND WITH TABLETS OF CLASS B IN N. ENTRANCE DEPOSIT ($\frac{2}{3}$).

engraver as indicative of its cargo on a vessel provided both with sails and rowers. The artificial tufts into which the mane is here divided correspond with those of our 'Chariot tablets', and, as in other cases, the details of the harness show a distinct relationship with Syro-Egyptian fashions. The close connexions at this time existing with Cyprus and, indeed, the absolute uniformity of some of the Cypro-Minoan chariot types depicted on vases with Egyptianizing versions of Type B, sufficiently indicate the general direction from which this fine breed of horses was imported.

Another large clay sealing, presenting the middle section of a similar class of ship, occurred, together with many of the 'Chariot tablets', in the considerable deposit of these and other clay documents found in the Northern Entrance Passage of the Palace. As in the former case, its archaeological context dates the seal impression to L. M. II. Both are sailing vessels, provided with deck shelters, the rowers beneath appearing in Fig. 805.

Minoan transport vessels on seal-stones.

The vessels may now be supplemented by the design on a recently discovered amygdaloid bead-seal, Fig. 807, formed of a black stone veined with red, also probably connected with the port of Knossos.¹ The stone, the form of which points to a somewhat earlier date, is fractured at both ends, but the steering gear was seemingly to the right. At the stern we see some kind of cabin, and there was probably, as usual with Egyptian ships, another at the bows. The broad sail also recalls the Egyptian form from Queen Hatshepsut's time onwards,² but the triple curves below on either side of the mast can hardly be taken to give an adequate idea of the rigging. In the case of the vessel seen in Fig. 806 the sail is furled and the yard lowered.

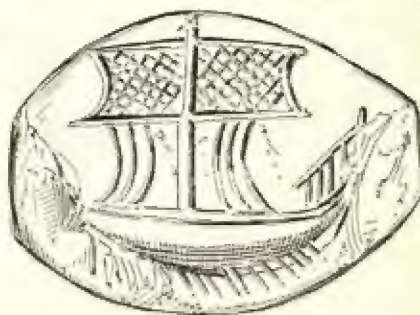


FIG. 807. SAILING VESSEL WITH STRUCTURE AT STERN: KNOSSES. (?)



FIG. 808. CLAY SEALING FROM H. TRIADA SHOWING CHARIOT HORSES AND PART OF DRIVER. (?)

Fine horses on sealing from Hagia Triada and 'Little Palace'.



FIG. 809. PART OF CLAY SEALING FROM LITTLE PALACE, KNOSSES, SHOWING FORE-PART OF HORSE. (?)

In addition to the horse superimposed on the transport vessel in Fig. 805, a good idea of the fine breed thus introduced into Crete may be gathered from the Hagia Triada seal impression, Fig. 808.

The two horses here, which, as already noticed, present the exceptional feature of displaying part of their fronts in perspective, are attached to an early example of the chariot of Type C. From its associations the sealing in this case is not later than L. M. I *b*.

Part of another clay seal impression from the L. M. II deposit of the Little Palace, Fig. 809, gives a good presentment of the fore-part of a horse with a bridle-like object.

A characteristic feature of these horses, repeated on the 'chariot' tablets and visible on the sealing, Fig. 805, is the manner in which the manes are divided into

¹ This was obtained, through Candia, by an Athens dealer in 1933. The stone is of hard black material with fine red veins, and is of the local breccia. It may possibly go

back beyond the limits of L. M. I. (Now, A. E. Coll.)

² See Duemichen, *Die Flotte einer ägyptischen Königin*.

knotted tufts. To a certain extent it finds an Egyptian parallel in the plumes that, from Amenhotep III's time onwards, decorate the backs of the horses' heads and become such a usual fashion in Ramesside times. These, as has been noted, were copied on the Cypro-Minoan chariot groups.

Manes in characteristic tufts: also L. M. III examples at Tiryns and Mycenae.

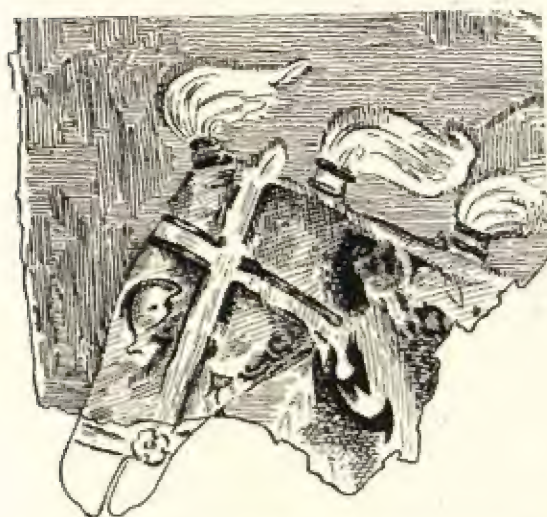


FIG. 810. HORSE'S HEAD ON FRESCO FRAGMENT: 'MEN'S MEGARON', MYCENAE.

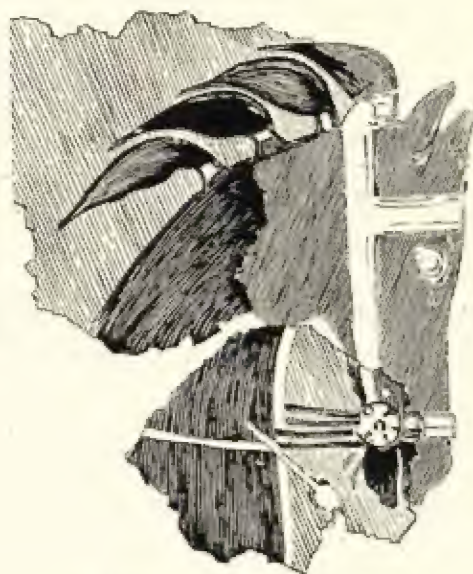


FIG. 811. HORSE'S HEAD FROM HUNTING FRESCO: TIRYNS.

These knots of hair are well illustrated on the painted fragment showing a horse's head from the 'Men's Megaron' at Mycenae,¹ Fig. 810, and another good example occurs in the case of a similar head on a fragment of the Stag-hunting fresco from Tiryns (Fig. 811)² which has also preserved our best materials for certain details in the structure of chariots such as those seen on the tablets. On the painted sarcophagus, again, from Hagia Triada,³ the knots are visible, though not so distinctly rendered. This method of gathering up the horse's mane into separate tufts must, indeed, be regarded as a distinctively Minoan fashion. It reappears on the Cypro-Minoan 'kraters' from Enkomi.

At Mycenae, where the surface tint has not been darkened by the action of fire, the horse appears to have been of a deep bay colour and at

¹ Tsountas, 'Εφ. 'Αρχ., 1887, Pl. XI, and p. 165.

² Rodenwaldt, *Tiryns*, ii, Pl. XIV, p. 110,

Fig. 47, and pp. 103, 104, Fragment 125.

³ R. Paribeni, *Il sarcofago dipinto di Hagia Triada* (Pl. iii, *Mon. Ant.*, xix).

Tiryns we see the same. On the sarcophagus the horse, as, elsewhere on it, a goat, is of a conventional blue tint, perhaps indicative of grey.

In all these pictorial representations it is clear that there was a nose-band. The evidence supplied by the figures of early chariots and draught animals on the Sumerian monuments shows that the practice was of remote antiquity in the old Chaldaean lands where wheeled traffic originated.¹

The fact that on the late frescoes (L. M. III *a*), at Mycenae and Tiryns, horses are to be seen led by grooms, must not be allowed to suggest the impression that at this period the art of riding was known either in Crete or Mainland Greece.² As we have seen above,³ even on the proto-Geometrical 'krater' from Mulianà, where a horse is seen with the legless body of a warrior rising above it, the artist was still quite unfamiliar with the idea of a mounted rider. The same ignorance is implied by rude Geometric seal impressions, and even on a jug of 'Phaleron' date from Athens we see a rider sitting helplessly on a horse's rump.⁴

The entire absence of horsemen on Minoan monuments is the more significant when we recall the special predilection that they display for feats of skill in which men and animals take part. Had the art of riding been then practised, it cannot be doubted that feats of horsemanship would have appeared in paintings, reliefs, and intaglios, beside those in which the Minoan cow-boys show their prowess. It is of interest, as illustrating the comparatively late date at which the Homeric poems were put together, that the art of riding was at that time not unknown. But, as was long ago

¹ This, indeed, seems to be the natural method, taken over in these regions by the horse from the earliest beasts of draught—oxen and asses. The appearance of bits in Central Europe coincides with the advent in the Danubian plains of a race of riders from the Asiatic side. In *Iliad* xix, l. 393, we already read of bits (χαλκοίς) in connexion with chariot horses. Helbig (*Hom. Epos*, p. 156) detects one on a chariot horse of Rameses II.

² In contemporary Egypt riding was hardly known in the XVIIIth Dynasty. The open-work axe-head of XVIIIth Dynasty type with a figure of a riding warrior in the B.M. (Budge, *Archaeologia*, liii, Pl. III, 2) is altogether exceptional, and may, as W. Max Müller suggests (*Asien und Europa*, p. 301, n. 4), refer to an Asiatic, though on that side, too, riding was

still rare. For Egyptian riders of Rameses II's time, see Chabas, *Antiquité historique*, p. 422 seqq. and Pl. III.

³ p. 374, Fig. 312, c.

⁴ On a *kantharos* from Grave IX of the Dipylon Cemetery (Bruckner and Pernice, *Ath. Mitth.*, 1893, Pl. VIII, 2). On a seal of similar transitional style from Megara (Furtwängler, *Olympia*, p. 188), the horseman is naively indicated with his body somewhat raised above the horse's back. On the 'Melian' and Early Attic class of vases the horseman is understood and becomes a recognized subject. In bronze works of the 'Italo-Halstatt' Province figures of riders do not go back beyond the Eighth Century B.C. (For Hallstatt examples, see Hoernes, *Gesch. d. bildender Kunst in Europa*, p. 483.)

Nose-
bands

Riding
still un-
known.

Homeric
refer-
ences to
riding
late and
un-
heroic.

pointed out by Aristarchos, the single references to the horseman in the *Iliad*¹ and *Odyssey*² are both taken from similes and are not used as illustrations of heroic practice.³

The cuirasses that appear beside the chariots of the tablets may be taken as evidence of their warlike destination. Hunting on wheels in the neighbourhood of Knossos is itself a ridiculous proposition. On the Mainland side, the use of chariots for this purpose is well authenticated, though their military use is also illustrated. Chariot scenes on the Mycenae *stelae* depict warriors with swords and spears, and an overthrown foeman lies prone beneath his body-shield. The concentration of war-chariots by the lord of Knossos could only be construed as a threat to the Mainland power, and the fleet might transport both horses and chariots.

Warlike
associa-
tions.

Chariots
on tablets
—inser-
tion of
cuirass.

Early Introduction of the Horse on the Mainland Side: Galloping Herd on Sword-Blade.

As we learn from the remarkable clay wagon of Palaikastro, wheeled traffic was already known in Crete in the earliest stage of M. M. I and at the very beginning of the Age of Palaces. But there is no reason for supposing that such early vehicles were horse-drawn, and we may reasonably infer that, as in Chaldaea, oxen and asses were for many centuries the sole animals of draught. The evidence, moreover, of the Grave *Stelae* at Mycenae, on which chariots and horses appear for the first time in the Aegean lands, tends to show that the use of the horse in this connexion was earlier diffused on the Mainland side, where the Argolid Plain offered more special facilities than in Crete itself. The chariot scene, for instance, on the Stela of the Vth Shaft Grave illustrated above⁴—though the 'rat-tailed' steed is very ill drawn—demonstrably belongs to the Third Middle Minoan Period. Of still greater value are the fine low reliefs on a sword blade from the same Grave, but in this case of the naturalistic work of that Period, presenting two files of galloping horses, altogether a score in number. The features of the heads here are well characterized, the mane, which runs out in a forelock over the forehead and falls in long folds above the neck: the bushy tails, the free, extended gallop⁵ give a magnificent idea of this Minoan breed (Fig. 812).

Early ap-
pearance
of horses
on Main-
land side.

Galloping
herd on
Shaft
Grave
blade.

¹ xv. 679.

² v. 371.

³ Κέλτητα αὐτὸς (sc. Ὀμηρος) μὲν αἶδε χρωμέ-
τους δὲ τοὺς ἵππους οὐ συνίστησιν.

⁴ For the Minoan gallop, see *P. of M.*, vol. i,

p. 713 seqq.

⁵ Fig. 812 is based on a section of the fine drawing of the sword-blade in Karo, *Schachtgräber*, *Atlas*, Pl. LXXXVI.

Here there is no question of the artificial knotting of the hair such as we see in the late Palatial Age of Knossos and Tiryns. So far from any

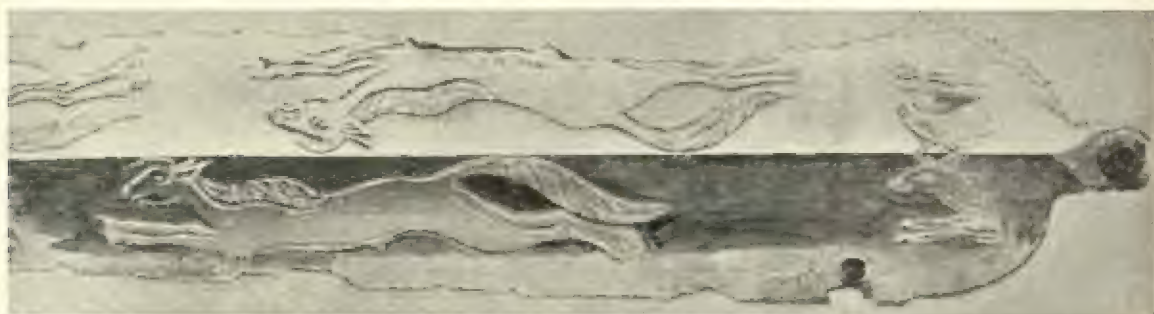


FIG. 812. GALLOPING HORSES IN LOW RELIEF ON SWORD-BLADE FROM FIFTH SHAFT GRAVE, MYCENAE.

association with harness there are no indications of the horses being even broken in. Rather the artist has given us a glimpse of herds of half-wild colts coursing in full freedom over the Argolid prairie.

Tablets from 'Armoury' Deposit relating to Manufacture of Horn-bows and Stores of Arrows.

Tablets
relating
to manu-
facture of
horn-
bows.

The series of tablets described above, relating to the framework of chariots, fallen into the basements of the 'Armoury', had already marked it as a scene of extensive manufacture in this branch of military equipment. Single tablets there found enumerate 80 or 90 chariot frames, while one refers to 478 wheels. Another hoard of clay tablets and sealings found near these shows that arms such as javelins, bows and arrows, were also here manufactured wholesale.

Amongst these, a group from which selections are given in Fig. 813, repeats a pictographic figure consisting of two curves with smaller excrescences which can present no difficulty to those familiar with presentations of Cretan wild-goats on contemporary intaglio types. These objects are, in fact, their long curving horns with the characteristic protuberances. We are also warranted in concluding that in connexion with the 'Armoury' tablets they refer to the raw material for horn-bows.

A head of the species (*Capra aegagrus*) to which the horns belong, bringing out the characteristic protuberances, is given in Fig. 814. On the Aegean side it is at present only found in Crete and Anti-Melos, though

it still has a wide Asiatic range to Persia and the Indian borders.¹ In Crete it is now mainly confined to the White Mountains, though it is still

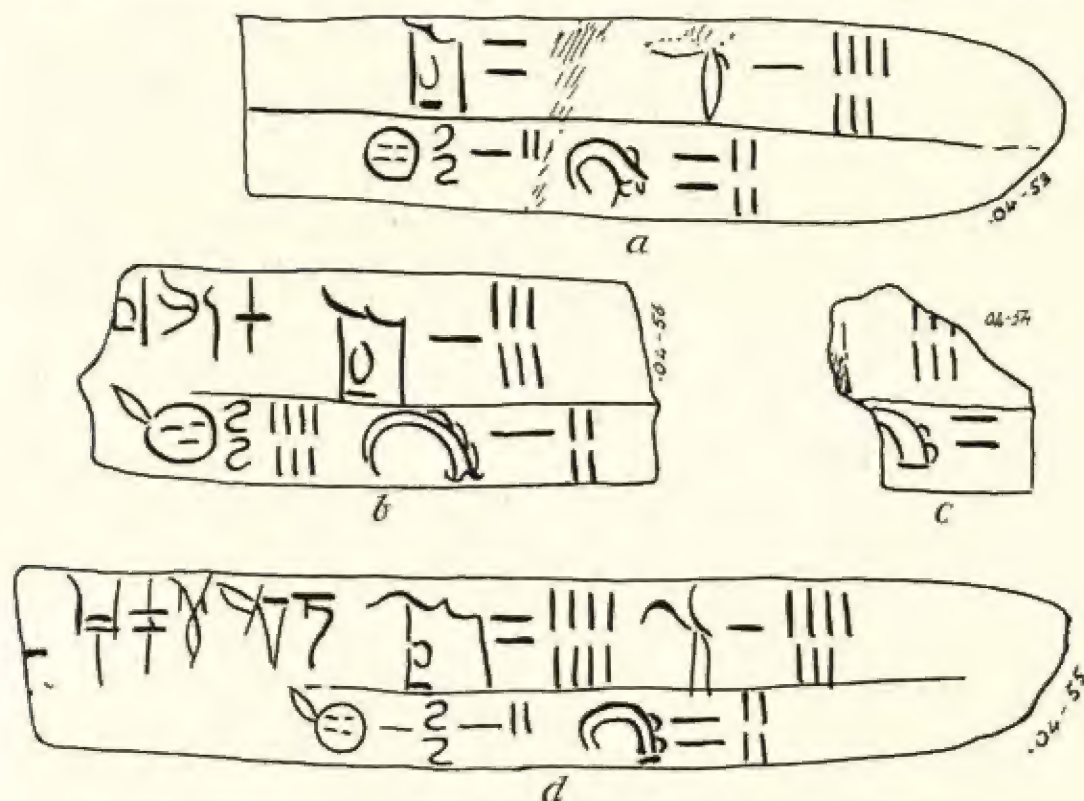


FIG. 813. TABLETS SHOWING HORNS OF CRETAN WILD-GOAT, USED FOR BOWS OF THE ASIATIC TYPE: 'ARMOURY' DEPOSIT.

found occasionally on Ida² and, more frequently, on the Lasithi ranges East of Knossos. A fresco fragment from Mycenae³ restored in Fig. 815 shows an *agrimi* head equipped with horns that rival those of the finest representatives of the species now extant.

The numbers of pairs of horns dealt with in the above tablets are respectively 24, 14, 20 (? +) and 24; in two other cases we meet with units 1 and 2. It is specially interesting to note that on the tablets

Semi-domesticated wild-goats.

¹ R. Lydekker, F.R.S., *Royal Natural History*, ii, pp. 239-41, from which the head Fig. 814 is taken. It is the Persian goat, known as *pusang*, which seems to be the finest existing representation of *Capra aegagrus*.

² Spratt, *Travels and Researches in Crete*

(1865), saw a herd of forty near the summit. Such an experience would to-day be impossible.

³ Tsountas, *Εφ. Ἀρχ.*, 1887, Pl. XI. (Numbering omitted.) In the text, p. 165 seqq., the fragment is not mentioned.

(Fig. 813, *b* and *d*) the horn sign is preceded by a compound figure already referred to, in which the 'herd' sign P^1 is combined with the circle



FIG. 814. HEAD OF *CAPRA AEGAGRUS*.



FIG. 815. FRESCO FRAGMENT, MYCENAE.

Horns
also se-
cured by
hunting.

was the bow itself, as well as darts and javelins. By great skill and cunning, as we see from the intaglio designs, he was actually able to waylay the *agrimì* and dispatch them with his sword—some of these truculent-looking monsters bearing horns a quarter of a man's stature in length. It is this method, indeed, that is illustrated by the story of Pandaros in the *Iliad*, who, on the steeps of the Trojan Ida, smote one at close quarters

containing grains of corn, \odot , interpreted above as signifying food for cattle. But, if this is the case, we are almost bound to infer that at least semi-domesticated wild-goats were kept in Late Minoan Crete to ensure a regular supply of horns for the Asiatic type of bow then in vogue. This conclusion is indeed the less surprising when it is remembered that the species (*Capra aegagrus*) is recognized to be in a main degree the parent of the domestic goat. In Crete at least relations between the wild and the tame stock have not been altogether lost, and Dr. Hogarth was even able to photograph an *agrimì* descending to a goatherd's flock on the steep of Dikta, near the Psychro Cave.

It might be suggested that where, as at Knossos, it was necessary to secure a large regular supply of wild-goat horns, some system of semi-domestication may have been devised—though animals capable of leaping up from 10 to 14 ft. would be difficult to fence in, and a good deal of hunting might still be necessary within the enclosure. The ordinary hunter—as we see from a considerable number of bead-seal types,² going back to the borders of the Early Minoan Age—had secured his quarry by hunting in the open. His main weapon

¹ See above, p. 722.

² See above, for instance, p. 577, Figs. 558, 559.

on the breast as it came to the rock where he was ambushed.¹ It is interesting to note that he took the horns to a special artificer in that material. This craftsman constructed, polished, and tipped with gold the composite bow, wherewith, at Athena's prompting, he shot his bolt at Menelaos.² The size of the horns is here given as sixteen palms³ (of three finger's breadth), or 4 ft. in length, though in Crete to-day they hardly attain 3 ft.⁴ The measure, however, can hardly be said to overstrain poetic licence, since, in the Persian habitat of this animal the horns frequently attain a length of 40 in., while in one specimen killed near Karachi, 'the length was upwards of 52½ in., with a basal girth of 7 in.'⁵

It is probable that at Knossos individuals who had succeeded in obtaining the horns by their own prowess brought them to the horn-workers' Department of the 'Armoury'.

The earlier form of the Cretan bow, as sufficiently illustrated above,⁶ is of the 'plain' kind identical with that of the early Nilotic and Libyan archers, in one piece, still preserved in Somaliland. It is coupled, moreover, with the broad-edged arrow,⁷ of the same associations. A good M. M. Ia example of this has been illustrated on the ivory half-cylinder showing the Minoan hunter and his hound stalking the *agrimì*.⁸ By the transitional phase, however, of M. M. III-L. M. Ia some of the Zakro sealings⁹ display bow-like objects certainly based on an acquaintance with the composite or horn-bow. The use of this in the neighbouring Anatolian regions is indeed well illustrated by a pictographic character of the more or less contemporary Phaestos Disk (inset). In the L. M. Ib Period the Asiatic, composite type of horn-bow¹⁰ was in general use throughout the Minoan World. On the bows held by the two combatants in the chariot scene referred to above¹¹—presenting some early version of the tale of Oedipus and Laios in the Cloven Way—the composite character of the bow is clearly illustrated, including the tendons wound round it at intervals.

Earlier
Cretan
bow of
Nilotic
and Lib-
yan type.

¹ *Iliad*, iv, 105 seqq. Pandaros' town, Zeleia, lay on a foothill of the Trojan Ida.

² Καὶ τὰ μὲν ἀσκήσας κεραυξόος ἤραρε τέκτων, πᾶν δ' εὖ λειψάς, χρυσέην ἐπέθηκε κορώνην.

³ ἑκαίδεκάδωρα.

⁴ The length of a couple of average size obtained by Pashley (*Travels in Crete*, ii, p. 271, n. 15, and woodcut, p. 266), was 2 ft. 7½ in.

⁵ R. Lydekker, *op. cit.*, p. 239.

⁶ See *P. of M.*, ii, Pt. I, p. 48 seqq. and

IV**

Figs. 23, 23 bis, and 24, and cf. above, pp. 172, 173.

⁷ *Ib.*, p. 48, Fig. 23, c, d.

⁸ *Ib.*, i, p. 197, Fig. 145.

⁹ See above, p. 174.



¹⁰ For the 'composite' type of bow, see especially H. Balfour, *On the Structure and Affinities of the Composite Bow* (*Journ. Anthr. Inst.*, xix (1890), p. 220 seqq.).

¹¹ See above, p. 817, Fig. 796.

This is the form of bow used by the Cretan hillmen till quite modern times.¹

**Clay Sealings and Documents relating to Arrows, from 'Armoury'
Deposit: Chests with Stores of Arrows.**

Sealings
and docu-
ments re-
lating to
arrows.

Of the clay seal impressions relating to arrows that had once secured the wooden chests containing them, something has already been said in a preceding Section.² The seal-type in this case was a couchant lion, on some specimens counter-marked by the 'arrow' sign, while the graffito inscription on one face  begins with the 'throne and sceptre' showing that the chests contained Government stores. On another side of sealings of the same group appears the inscription .

'Armoury'
deposit—
Chests
with
arrows.

Two actual depots of arrow-plates were found at a distance of 3 metres from one another. These had been contained in wooden chests with bronze loop handles which—as the broken pieces of cement pavement found beneath their remains showed—had been precipitated from an upper floor. The sealings were of the usual three-sided kind,³ the string passing through their major axis. Both chests had been sealed in an identical manner with the same lion signet and similar inscriptions, and together they afforded the most complete illustration of the Minoan method of controlling and safeguarding valuable possessions that has yet been supplied, at Knossos or elsewhere, by similar remains. In no other instance have the actual chests and sealings been found in direct association with the objects that they had secured, and the documents relating to them.

Embedded in the debris of the chests, once so elaborately sealed and registered, were the carbonized debris of the shafts, and, partly attaching to

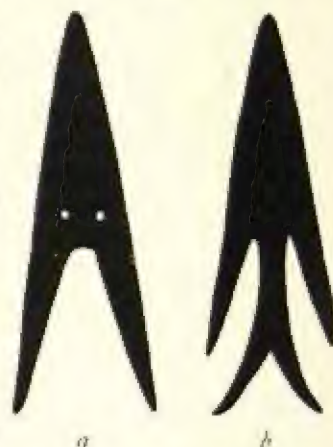


FIG. 816 *a, b*. ARROW-PLATES FROM 'ARMOURY' DEPOSIT (ENLARGED BY A QUARTER).

¹ A long bow of this type, together with quiver, sword, and hunting knife, are worn by the Sixteenth-Century Cretan mountaineer as represented in a Venetian drawing (reproduced by Pashley, *Travels in Crete*, ii, p. 252).

² See above, pp. 616, 617, and Fig. 603,

and cf. A. E., *Knossos, Report*, 1904, pp. 59-62.

³ The sealings in each case showed the lion signet and coupled with *graffiti* on the other sides. Similar forms were associated with both chests.

this, the remains of the bronze plates that had formed the central part of the arrow-heads. These, as shown in Fig. 816 opposite, were of two principal types, with and without a stem. With them were also found three bone

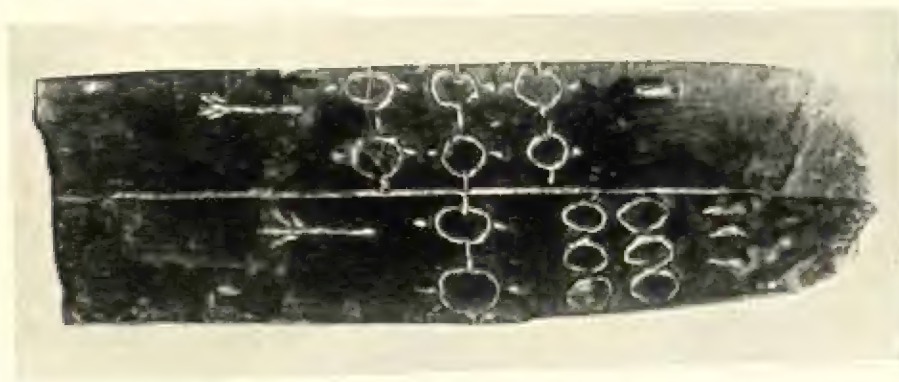


FIG. 817. CONCLUDING SECTION OF TABLET FROM 'ARMOURY' DEPOSIT REFERRING TO 8,640 ARROWS.

arrow-heads and one broken specimen of flint, all of the stemless kind. Hundreds of specimens of the bronze plates, mostly of those without stems, were brought out, but many of these were so cemented together by oxidation that it was impossible to separate them.

Of the numbers some idea can be formed by a clay tablet belonging to the deposit, of which the latter half was preserved, Fig. 817, on which were two entries, following in each case the pictographic figure of an arrow, relating to large lots numbering respectively 6,010 and 2,630, or 8,640 in all.

Tablet referring to 8,640.

In this connexion it is noteworthy that, in a chamber tomb at Mycenae, Tsountas found twenty similar bronze 'arrow-plates' in two bundles of 10 each,¹ an interesting record of the Minoan decimal reckoning. The round numbers of both lots on the Knossian tablet may also suggest that they were calculated by the decad.

On the 'percentage tablets' described above² it appears that in business documents the items dealt with—in that case herds of cattle—were grouped for convenience of reckoning in hundreds or, occasionally, their halves or doubles—50, or 200. There seems to be some probability that these 'Armoury' chests were made to contain 10,000 arrows.

¹ Tsountas and Manatt, *The Mycenaean Age*, p. 206 and Figs. 92, 93. Fig. 92, however, gives a wrong idea of the plate, the two small holes for attachment to the wooden covering

being omitted. They are, moreover, inaccurately described as 'arrow-heads' though only forming a section of such.

² See above, pp. 692, 693.

The Bronze 'Arrow-plates' (see above, Fig. 816 *a, b*).

The
Bronze
'arrow-
plates'—
their
Mainland
diffusion.

The 'arrow-plates' referred to are of two forms—the ordinary barbed shape—type *a*, and those with forked stems between the barbs—type *b*, which are less abundant. They are common both in Crete and in Mainland Greece, where the notched stone prototypes of the former class in flint, chalcedony, and especially obsidian are widely distributed.¹ In the Fourth Shaft Grave at Mycenae thirty-five obsidian arrow-heads of this form were found in a heap.² These may go back well into L. M. I *a*, otherwise there is no evidence of 'arrow-plates' of bronze of earlier date than these of L. M. II 'Armoury' stores, and those of the stemless type *a*, about twenty in number, from the contemporary 'Tomb of the Double Axes'.³ Fifteen of both varieties had been deposited in the slightly later 'Hunter's Grave' at Zafer Papoura,⁴ and eight are recorded from the Late Minoan cemetery of Phaestos.⁵

That this class of arrow-plate was already coming into use in the mature L. M. I *b* Period—in the first half, that is, of the Fifteenth Century B.C.—may be gathered from the occurrence of a specimen (unfortunately much broken) of the simple barbed form without a stem in one of the Kakovatos *tholoi*.⁶ Against this solitary find is to be set the occurrence in the same cemetery of 'Nestor's Pylos' of at least 40 examples (counting fragmentary specimens), in finely chipped brown flint, of the 'notched' form. It is probable that a similar arrow-plate of bronze found in the *dromos* of the Heraeon Tomb⁷ belongs to the same date.

¹ The notched type of stone arrow-head also extends to Thessaly, where, however, the commoner form has a stem or tang. (See Tsountas, *Αἱ προϊστορικαὶ ἀκροπόλεις Διωνίου καὶ Σέσκλου*, Pl. 42, 1-10, and cf. Wace and Thompson, *Prehistoric Thessaly*, pp. 53, 71, 84, 161, 165). In Crete, as already shown (*P. of M.*, ii, Pt. I, p. 48 seqq.), one of the Nilotic chisel-bladed kind is still shown, accompanied with the 'proto-Libyan' bow on a M. M. I *a* seal.

² Schliemann, *Mycenae*, pp. 271, 272, and Fig. 435; for prototypes see Karo, *Schachtgräber*, *Atlas*, Pl. CI, 536-40. It has been suggested (Tsountas and Manatt, *Myc. Age*, p. 206) that these may represent the contents of a quiver.

³ A. E., *The Tomb of the Double Axes*, &c.,

p. 42, Fig. 54, 2 *f*; *Archaeologia*, vol. lxx.

⁴ A. E., *The Tombs of Knossos*, i, pp. 31, 32, and Fig. 28. The Tomb (No. 10) was a 'pit-cave'. The only painted vessel, about 8 cm. high, found in it—a one-handled vase with a high beak and waved decoration round the upper part of its body—resembles in form one from the similar grave, No. 6, of L. M. III *a* date.

⁵ L. Savignoni, *Scavi e scoperte nella necropoli di Phaestos*, *Mon. Ant.*, xiv, p. 547, and Fig. 21: barbed and stemmed.

⁶ K. Müller, *Alt. Pylos*, (*Ath. Mitth.*, xxxiv, 1909), p. 202, who compares the specimen of this type from the 'Hunter's Grave' (*Preh.*, *Tombs of Knossos*, p. 32, Fig. 28 (middle).

⁷ Cited by K. Müller, *loc. cit.*

No stone arrow-heads with a stem or tang between the barbs are known from any Minoan deposits either of Crete or Mainland Greece, and

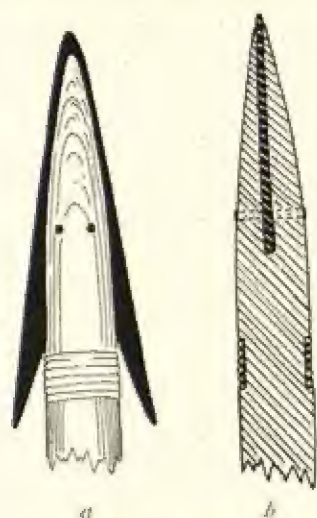


FIG. 818 *a, b*. SUGGESTED METHOD OF HAFTING PLATE IN SHAFT OF ARROW. (2)

the circumstance that the earlier bronze arrow-plates known¹—those namely dated to L. M. I *b*—are stemless (see Fig. 816, *a*), like the flint and obsidian prototypes, tends to show that this was the original form. In the last Palatial Age (L. M. II) the stemless form alone occurred among a score of bronze plates from the 'Tomb of the Double Axes'. On the other hand, as we have seen, in the 'Armoury' deposit, a small minority of plates came to light representing the type with a forked stem between the barbs (Fig. 816, *b*) which there occurred side by side with the other. Both classes were found in Chamber Tomb II at Dendrà, belonging to the early part of L. M. III *a*.

The exiguous dimensions and thinness of these 'arrow-plates' might at first sight be taken to show that they were only used for killing

Arrow-plates inserted in hardened wood points.

very small game. But their appearance is deceptive. As has already been implied by the name here given to them, they only supplied the points and cutting edges of arrow-heads of a much more solid appearance. The average length of the stemless class from 3.5 to 4 centimetres (*c.* $1\frac{3}{8}$ to $1\frac{5}{8}$ inches)² practically corresponds with that of the contemporary arrow-

¹ It is impossible to admit Mr. Wace's claim (*B. S. A.*, xxv, p. 78, and Fig. 18, endorsed by him in *Chamber Tombs of Mycenae*, (*Archaeologia*), 1932, p. 187) that a barbed bronze arrow-plate of the usual type and dimensions (3.3 cm. in length and 1.25 wide at the barbs) found in a shallow Middle Helladic Grave of the usual form beneath the Ramp House (L. M. III), itself belongs to the Middle Helladic Period. The ease with which such an object could have made its way into the grave hollow when it was cut into by the L. M. III structure is fairly obvious. But, apart from this, the idea that this form of bronze 'arrow-plate', so well established in Minoan Crete, was of Mainland, Helladic origin is the more extravagant when we re-

member the general poverty of that form of culture in metal fabrics. Unfortunately this suggestion is of a piece with that put forward on the same page (*B. S. A.*, *loc. cit.*, p. 78), that the Shaft Graves themselves 'are only elaborate versions of the ordinary M. H. cist grave hollowed out of the rock'. The normal Minoan structure of the 'Shaft Graves' has been sufficiently demonstrated above.

² Those, however, in the Tomb of the Double Axes attained a length of 4.9 to 5.2 centimetres. One from the Kalkanì cemetery (Tomb 515) was 5.5 cm. in length (Wace, *Arch.*, lxxxii, Pl. XX, No. 38). This exceptional specimen of L. M. III *a* date had a third hole, perhaps a pair, near its point.

heads of flint and obsidian, as does their width of 1-1.5 cm. (c. $\frac{7}{16}$ to $\frac{9}{16}$ in.). On the other hand, the two small holes visible just above the fork of the barb (see Fig. 816, *a*) were clearly designed for metal rivets that secured the blade to the end of the wooden shaft, this being provided with a slit for their reception. The end of the shaft would itself have been pointed and hardened by exposure to fire.

The structure of the arrow-heads as thus completed is illustrated by Fig. 818, *a*, and the section, Fig. 818, *b*.

The use of these small thin plates was naturally dictated by the need of great economy of metal in the case of weapons a large proportion of which was continually lost.¹

These arrows were equally effective both for hunting and for war, and if the name of 'Hunter's Grave' may still be fitly given to the poorly furnished 'pit-cave'² with 'arrow-plates' of both types *a* and *b*, it must not be forgotten that in the 'Tomb of the Double Axes', the plates—in that case stemless—were associated with the gold-plated studs of what had once been a sword of sumptuous fabric, placed beside the remains of a princely warrior³ in his symbolically cut rock cist.

Javelins or Darts

What, from its relatively short shaft, must be regarded as a javelin or

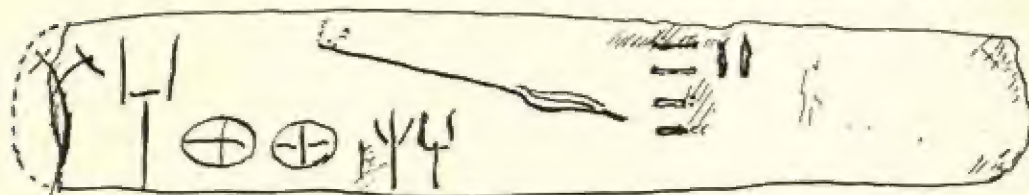


FIG. 819. TABLET FROM 'ARMOURY' DEPOSIT REFERRING TO JAVELINS.

Tablet relating to javelins or darts.

dart appears on a tablet (Fig. 819) found in the same 'Armoury' deposit as that containing the 'arrow' tablets. What seems to have been the initial sign is partly broken off: it is followed by H . The numbers

¹ A unique example of a socketed bronze arrow-head 5.2 cm. in length and of spear-head shape was found in an E. M. II Grave (No. 19) at Mochlos. Seager (*Mochlos*, p. 74) suggests that it may have been a M. M. I intrusion, but it has the appearance of be-

longing to a much later date.

² *Preh. Tombs of Knossos*, pp. 31, 32, and Fig. 28 (Zafer Papoura, No. 10).

³ A. E., *Tomb of the Double Axes*, &c., pp. 42 and 58; as noted above, these were exceptionally large.

following the pictorial figure of the weapon seem to be $\equiv \parallel = 42$. It appears to have had a mid-rib to its blade, like a spear- or lance-head.

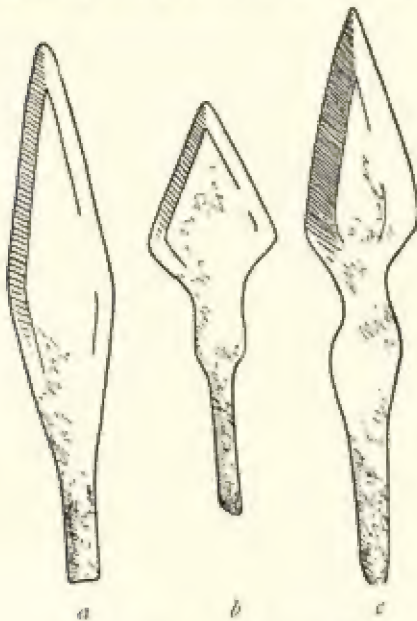


FIG. 820 *a, b, c.* BRONZE JAVELIN HEADS FROM CHAMBER TOMB, ISOPATA (L. M. III *a*).

Javelins are also seen hurled by serried ranks of foot soldiers on 'Miniature' fresco fragments from Knossos belonging to what may well have been a siege scene.¹ Bronze specimens illustrating three types of such, together with 'arrow-plates' like those described above, were brought to light in a chamber tomb (I A), belonging to the early part of L. M. III, at Isopata.² (See Fig. 820.)

Spears or Lances.

On a miniature fragment of the same series³ there stands a youthful officer resting his arm on a spear, like the 'Young Prince' on the Hagia Triada Cup. The 'Captain of the Blacks' on another Knossian fresco fragment dating from the later days of the Palace carries on his

Spears much used by Minoan warriors.

shoulder two spears or lances, and his mercenary followers appears to have held a single lance in the same manner.⁴ But for the regulation equipment of the Palace 'knights' both sword and spear were essential. In its completest form, apart from the corslet—often, as we have seen, compounded for by a bronze ingot—it consisted of two spears and a long and short sword.

Some account of Minoan spear-heads has been given by me in my little work on the Mycenae Tombs,⁵ and in this place it may therefore be sufficient to call attention to the type of weapon usually in vogue at Knossos in the last Palatial Age, and to some splendid examples from the tombs of its warrior princes.

¹ *P. of M.*, iii, p. 82, Fig. 45, *a, b*.

² *A. E.*, *Tomb of the Double Axes*, &c., p. 6, Fig. 10 (redrawn). They are there compared with those of the 'Hunter's Grave'.

³ *P. of M.*, iii, p. 83, Fig. 46. For the Hagia Triada cup, see *Ib.*, ii, Pt. II, p. 791, Fig. 516.

⁴ *Ib.*, ii, Pt. II, pp. 755, 756, and Pl. XIII, and see below, p. 886, Fig. 869.

⁵ *The Shaft Graves and Beehive Tombs of Mycenae, and their Interrelation* (Macmillan, 1929).

Types of Bronze Spear-heads in Vogue at Knossos in the Last Palace Period.

Types of
spear-
heads.

Socketed bronze spear-heads, both with a stemmed and an almost flat blade, are already seen in a fully developed form in Grave XX at Mochlos,¹

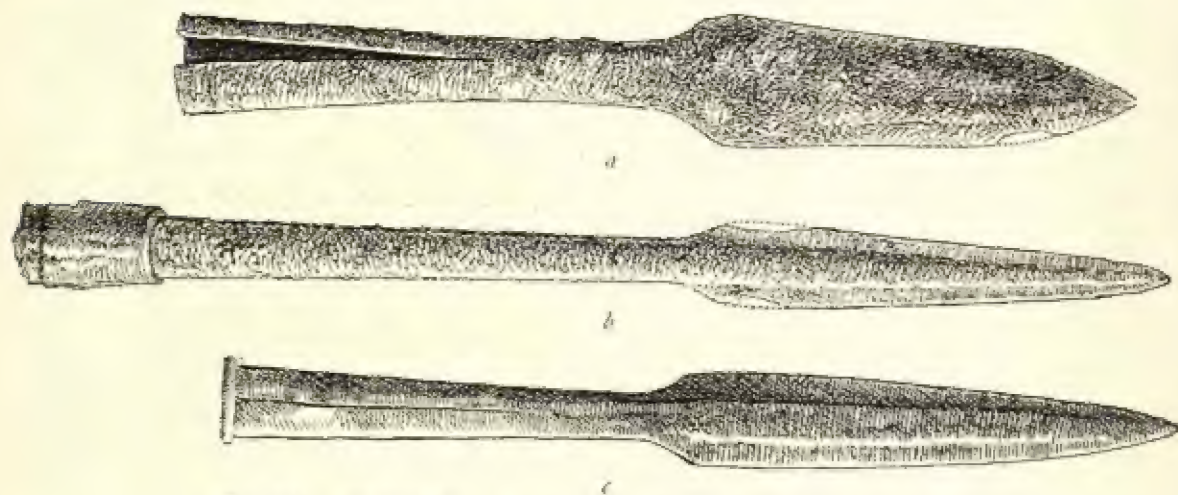


FIG. 821. BRONZE SPEAR-HEADS FROM GRAVE XX, MOCHLOS: M. M. III.

where the later part of the contents, to which these belonged, is of M. M. III date (Fig. 821, *a*, *b*, *c*). As is clearly illustrated by *a*, the sockets of these were formed of a tongue of metal beaten round a mandril, a process that was apt to leave, as in this case, an awkward gap between the two borders of the strip thus coiled. To correct this the simple process was resorted to of encircling the extremity with a ring of metal—broad as seen in *b*, quite narrow in the case of *c*.

The line of division along the borders of the original tongue of metal is seen on many later examples as well as the encircling ring, which sometimes attains greater dimensions. The end of the socket of a spear-head (Fig. 822) from the Sixth Shaft Grave at Mycenae is shown in Fig. 823.² In an ornamental shape this feature is best illustrated by the decorative ring inlaid with gold 'lily work' on the remarkable spear-like weapon of King Kames of Egypt (Fig. 824)—belonging to the final decade of the Sixteenth Century B.C.³

¹ Seager, *Mochlos*, pp. 74, 75, and Fig. 2. See, too, A. E., *Shaft Graves*, &c., pp. 38, 39, and Fig. 27.

² From Gilliéron's restoration of this spear-

head.

³ Now in the Ashmolean Museum. The weapon was rather used as a sword than a spear. The ring there is fixed by the process

It is possible that a Minoan reaction is to be traced in this case¹—such as is clearly visible in the axe-head and dagger of his successor King Aahmes.



FIG. 822. BRONZE SPEAR-HEAD FROM GRAVE VI AT MYCENAE.

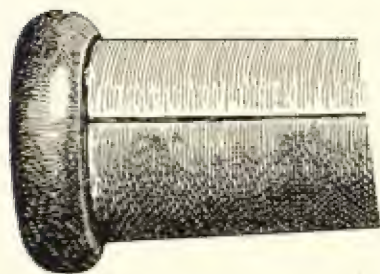


FIG. 823. END OF SOCKET OF BRONZE SPEAR-HEAD FROM GRAVE VI, MYCENAE.



FIG. 824. END OF BRONZE SOCKET OF SPEAR-LIKE WEAPON OF KING KAMES OF EGYPT WITH INLAID LILY WORK OF GOLD.

The ring as a constructive part of the bronze spear-heads for holding together the divided socket, as at Mochlos, and further developed at Knossos and Mycenae, is of special interest for the striking illustration that it supplies of epic tradition. A passage, thrice repeated in the *Iliad*, contains a clear reference to this feature in the description of Hector's spear.

Ring to encircle divided socket: Hector's spear explained.

'In his hand he held his spear, eleven cubits long, and before him gleamed the spear-head of bronze and round it ran a ring of gold.'²

The Homeric allusion to this feature is chronologically important since in the cast spear-heads of the Later Bronze Age the circle disappears.

known as 'burning on'. (See Sir John Evans, *Archaeologia*, liii (1892), p. 86.)

¹ The golden lilies are of Egyptianizing type, but their alternating arrangement in reversed positions diagonally set recalls the small frieze of lilies of M. M. III date from Phylakopi (see *P. of M.*, iii, p. 132, Fig. 87), and, again, in gold inlay on a dagger-blade from the Fifth Shaft Grave at Mycenae (Karo, *Schachtgräber*, Atlas, Pl. XCII).

² *Il.*, vi, 319, 320, and viii, 494, 495.

παύροιθε δὲ λάμπεται δονρός

αἰχμή χαλκείη, περί δὲ χρύσεος θέε πόρκης.

This had been explained by Dr. Leaf as referring to some kind of ferrule, enclosing the divided ends of a wooden shaft, in which the stem or tang of a certain class of ancient spears was inserted (*J. H. S.*, vi, 300, 301, and cf. W. Leaf, *The Iliad*, vol. i, p. 217, note 319). It is true that the early

L. M. II
spear-
heads at
Knossos.

The form of spear- or lance-head most typical of the closing Palatial Age at Knossos is that of which two good specimens, one larger than the other, were found in the Chieftain's Grave described below. The longer of

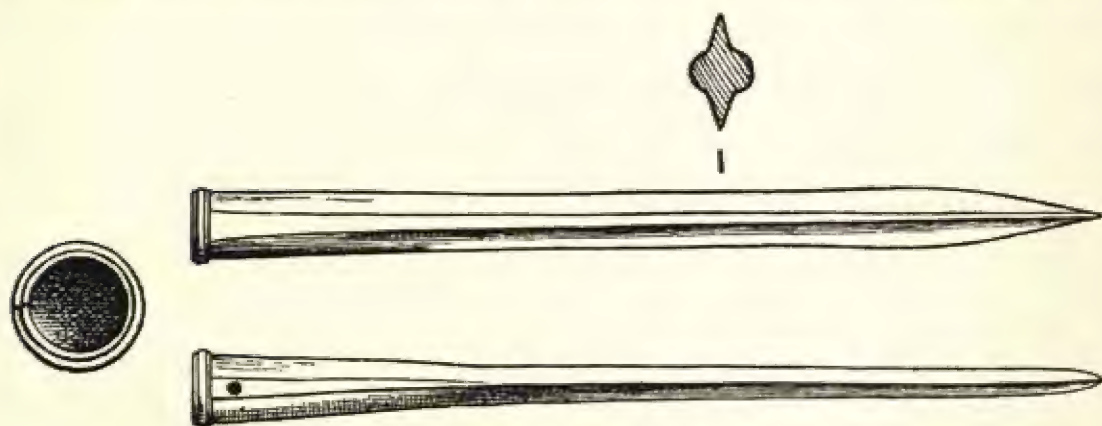


FIG. 825. BRONZE SPEAR-HEAD WITH RINGED SOCKET: CHIEFTAIN'S GRAVE, ZAFER PAPOURA. (TYPICAL LATE PALATIAL FORM.)

the two is 34.4 centimetres in length ($1\frac{3}{4}$ inches) and its socket is surrounded by a bronze ring in bossed relief. This is here illustrated in Fig. 825. The butt end of the socket of a spear-head of similar type from a more or less contemporary grave was surrounded with a flatter circlet, and in that case, some kind of metal plate, of which the traces are evident, also surrounded the lower end of the socket to a width of 3.5 centimetres ($\frac{1}{2}$ inch). Another lance-head from this interment¹ gives a good example of the more imperfect form of fabric. It is not surrounded by any kind of containing ring and shows a yawning gap along its side like Fig. 821, *a*. The outer contour of the section of lance-heads of this class is of an octagonal form, showing slight facets (see Fig. 825). On the whole this must be regarded as a very practical type for its purpose, both compact and penetrating.

spears, both of the Cycladic and Troadic areas, were of this stemmed type (which recurs in Cyprus), but these seem to disappear from the Aegean region at a date round about 2,000 B.C., and roughly equivalent to the close of the Early Minoan Age in Crete. But in Crete (where the bronze weapon types of Mycenae originated) this stemmed form is, so far as the evidence goes, entirely absent, while

on the other hand, the incipient socket also requires some kind of ferrule or ring. There is evidence that the socket was early known in Egypt (see A. E., *Shaft Graves, &c.*, p. 40, n. 2). The Mainland class of early bronze spear-heads was of peculiar form with a shoe-like socket (*Ib.*, Fig. 31).

¹ Of the type presenting a sharp median ridge.

Sword-types of the Closing Palatial Age: Foils or Rapiers without Guards.

Of the three principal sword-types of the last period of the Palace, here described as of the plain 'rapier' shape without guards, and the 'horned' Sword-types of late Palatial Age.

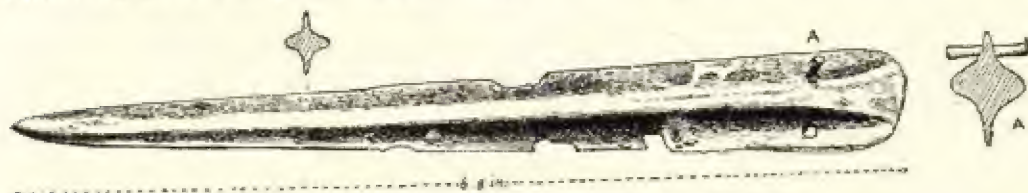


FIG. 826. BRONZE DAGGER FROM PSYCHRO CAVE.

and 'cruciform' forms, the first two can be shown to have an antecedent history going back well into the Middle Minoan Age.

In all cases these can be traced back to pre-existing dagger-forms, not excepting the phenomenal sword of Mallia—the Minoan 'Durendal'—the length of which, with its crystal pommel, was wellnigh a metre long and which had sprung into being of full stature in the earliest phase of M. M. I.¹ Side by side with it was found its archetype in the shape of a dagger-blade of the same formation, showing a flat central facet, and similar gold plating with herring-bone ornament of Early Minoan tradition.

But the foils or guardless rapiers that occupy such an important place among the sword types of Mycenae and those of the last Palatial Age at Knossos with their strongly accentuated mid-ribs, do not make their appearance till at least the Third Middle Minoan Period. They stand in apparent relation to a thick-stemmed dagger-type, of which a late version from the Psychro Cave is given in Fig. 826.

Two specimens of the slender high-ribbed rapier, as already seen in the developed form, occurred in an isolated sepulchral deposit brought to light at Isopata (Fig. 827, *a*, *b*). These are shown by the 'bridge' spouted stone vase (*c*) found with them—decorated with shell inlays—and an alabastron of Middle Empire tradition to date from the earlier phase of M. M. III. *a* is provided with a flat tang showing a rivet-hole, beyond which point it is broken away. With it (*b*) were parts of the blade of another foil.

The sepulchral Deposit of Isopata with its M. M. I *a* associations carries back this rapier type to at least the close of the Seventeenth Century B.C., though, as pointed out above, the succeeding M. M. III *b* Period must, from certain interrelations visible with New Empire Egypt,² come

Rapiers with strong midribs: M. M. III *a* example.

Shaft-Grave examples.

¹ See *P. of M.*, ii, Pt. I, pp. 272, 273, and Figs. 162, 163; both specimens are incomplete.

² See *P. of M.*, i, pp. 550, 551, and cf. Pt. I, above, p. 191.

down somewhat later than at first supposed—to a date probably approaching 1550 B.C.

The fullest illustration of these round-shouldered short tanged swords—in that case without rivet-holes—has now been supplied by the votive pit in the Arkalokhori Cave. A series of these of about a metre's length is given in Suppl. Pl. LXVIII.¹ Sword types of the

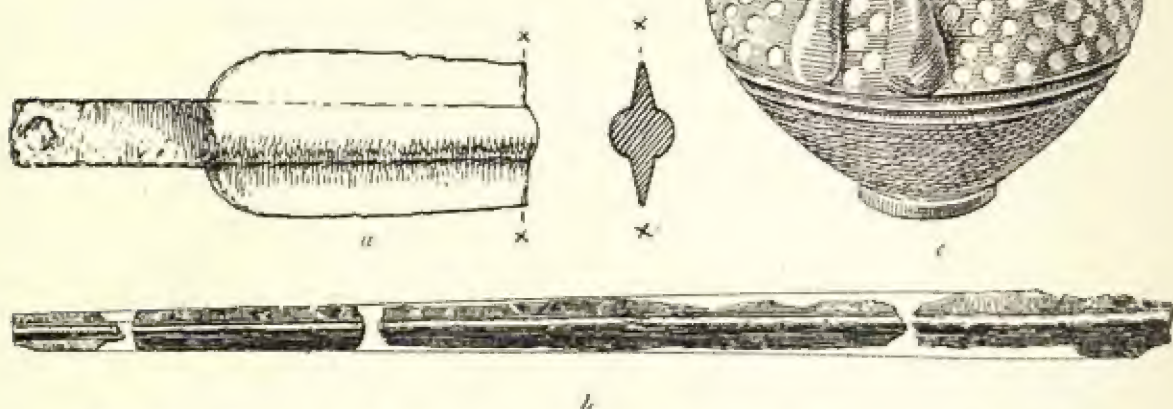


FIG. 827. REMAINS OF BRONZE RAPIERS (a, b) AND INLAID BROWN LIMESTONE BOWL FROM M. M. III a SEPULCHRAL DEPOSIT, ISOPATA, KNOSSOS.

same class, with sharply defined median ribs, were abundant in the Mycenae Shaft Graves,² including the remarkable blade, illustrated above, presenting the galloping horses. The type seems to have survived into L. M. I a.

The early affinities of the Isopata sword are the more interesting when it is recalled that the brown limestone bowl with shell inlays, also contained in the same group,³ is of identical fabric with a M. M. III a stone-ware class represented by the limestone pot from the *dromos* of the 'Atreus' Tomb.⁴ It is also to be observed that the plait-work form of decoration characteristic of the Middle Minoan phase,⁵ illustrated both by limestone ewers and the steatite pithoi found in the 'Atreus' vault itself⁶ and by the fragment of a capital of

¹ From a photograph kindly sent me by Dr. Marinatos. For the axes found, see above, Pt. I, p. 344 seqq. and Figure at end of Part.

² Karo, *Schachtgräber, Text*, p. 201, note 3, quite rightly observes 'Die Klingen von Isopata sind wohl nur wenig älter als die frühesten mykenischen Beispiele'.

³ A. E., *Tomb of the Double Axes*, p. 3.

Fig. 1, and cf. *P. of M.*, i, p. 413, Fig. 298 a, and cf. Fig. 297.

⁴ See above, p. 234, Fig. 179.

⁵ *P. of M.*, i, p. 412, Fig. 296, and see above Pt. I, p. 233 and Pt. II, p. 636.

⁶ See above, Pt. i, p. 231, and cf. *B.S.A.*, xxv, pp. 366, 367. Formerly in the Athens Museum.

one of the entrance columns of the 'Klytemnestra' Tomb,¹ is also applied to a rapier stem of this class from Shaft Grave V (Fig. 828 a).

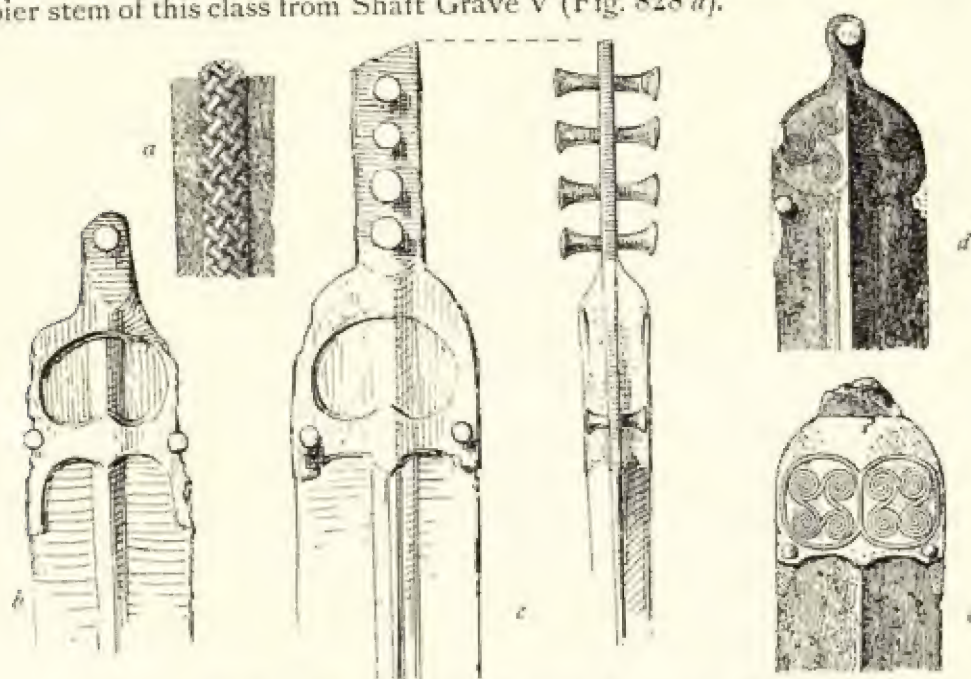


FIG. 828. RAPIER TYPES FROM SHAFT GRAVES, MYCENAE. (SEE A. E., *SHAFT GRAVES, ETC.*, P. 35.)

In the tomb No. 44, of the 'Shaft Grave' type, at Zafer Papoura, what seems to be a somewhat later variety of this rapier class with a pointed tang, occurred,² resembling a specimen (No. 771) from Grave V at Mycenae, but with no visible rivet-holes.³ Its length was 53 centimetres (*c.* 21 inches) contrasting with that of a fine 'horned' sword found with it which was 93 cm. (*c.* 36½ in.). The association of a long and a short sword was usual in the graves of Knossian warriors. They were evidently alternatively equipped for action at close quarters as well as at arm's length.

The Minoan 'Horned' Sword.

The long-sword *par excellence* of the Knossian graves had a two-horned guard. It is sometimes nearly a metre long—one from the 'Chieftain's Grave' at Knossos attaining a length, with its pommel, of 95.5 centimetres—and presents a well-marked median ridge.

¹ See above, Pt. I, p. 233, and cf. *Shaft Graves, &c.*, p. 86. Wace, *B.S.A.*, xxv, p. 364, connects the fragment with one of the fluted entrance columns.

² *Tombs of Knossos*, i, pp. 61, 62, and Fig. 65 and Pl. XCI.

³ Karo, *Schachtgräber*, *Atlas*, Pl. LXXX.

Zafer
Papoura
type.

Minoan
'horned'
swords.

Evolution
from dag-
ger types.

In this case, too, the Cretan evidence enables us to trace the origin of this horned shape to dagger types with incipient flanges along the upper margin of the blade such as the example from the smaller Tholos at

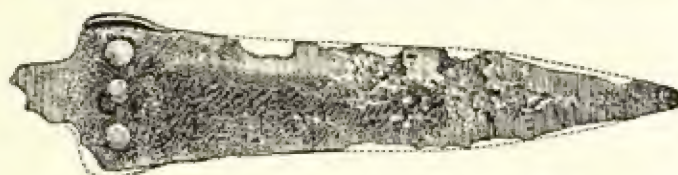


FIG. 829. DAGGER FROM SMALLER THOLOS, H. TRIADA, WITH INCIPIENT FLANGES; A PROTOTYPE OF MINOAN SWORD (M. M. II a).

Hagia Triada given in Fig. 829, which can be shown to go back to the earlier phase, *a*, of M. M. II. The remarkable bronze dagger-blade from Lasithi—the prototype of the

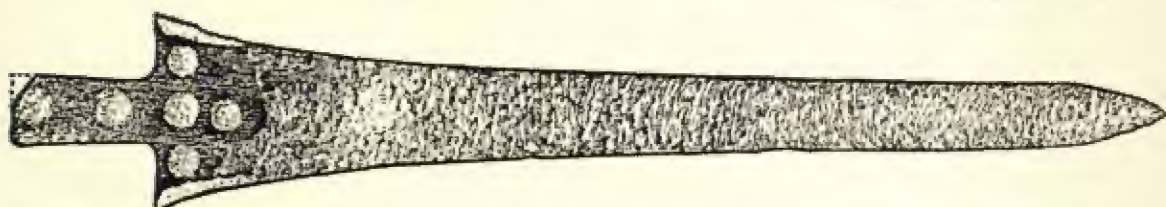


FIG. 830. SWORD FROM FIFTH SHAFT GRAVE, MYCENAE: 'TRANSITIONAL TO 'HORNED' TYPE.

inlaid specimens from Mycenae—presenting the engraved designs of a boar-hunt and of a fight between bulls and marked by similar flanges on the shoulders¹ must also belong approximately to the same date.

In the latter case the flange is already seen carried round the upper shoulder of the blade and forming thus, in the square-cut type, an angle which in turn gives the origin of the 'horned' form of hilt. A typical example of a sword with pointed angles showing flanges, and transitional to the fully developed 'horned' type is supplied by Fig. 830 from the Fifth Shaft Grave at Mycenae. A good specimen of a horned dagger already appears in the early Sixth Grave there (Fig. 833), and beside it was a 'short' sword, showing an approach to the same type.²

¹ Kidney-shaped and oval openings of hilt-plates.

None of the Shaft Grave swords at Mycenae supply a fully complete version of the type, showing the curvature of the 'horns', though a gold hilt-plate from Grave V (Fig. 831) gives a good illustration of this feature in their attachment.³ The opening in the middle of the plate which displays the

¹ *P. of M.*, i, pp. 718-20, and Fig. 541, *a, b*: for the inlaid dagger-blades from Mycenae see *op. cit.*, iii, p. 118 seqq.

² G. Karo, *Schachtgräber von Mykenai*, *Text*, pp. 160, 161; *Atlas*, Pl. XCV, Nos. 904, 905.

³ Tsountas, *Εφ. 'Αρχ.*, 1897, p. 113, Fig. 2. For a detailed representation see now Karo, *op. cit.*, Pl. LXXXII, No. 725. In the *Text*, p. 136, this 'horned' hilt-plate is most unfortunately attached to the upper part of the beautiful round-shouldered and short-tanged

midrib of the blade is here—as in the case of this class of sword—generally of a kidney-shaped outline, and this also recurs in the case of the 'rapier' class (see Fig. 828, *b*, *c*). In the later, cruciform type of sword, as will be shown, the outline is approximately a pure oval.

An angular form of shoulders, representing the horned type in the

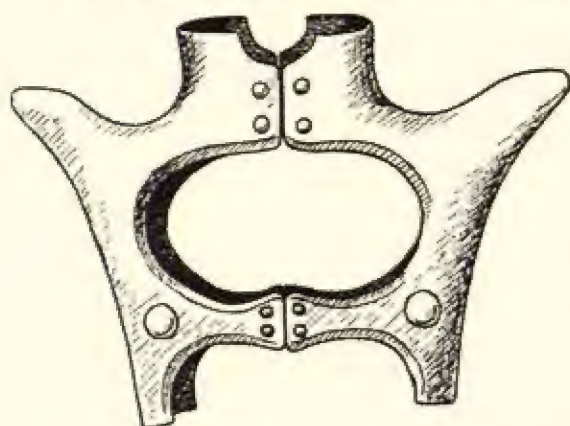


FIG. 831. GOLD CASING OF HILT OF 'HORNED' SWORD; FIFTH SHAFT GRAVE, MYCENAE.

incipient stage, is clearly shown in the sword held by the charioteer on the early stela from the Fifth Shaft Grave at Mycenae illustrated above¹ which may be placed within the lower limits of M.M. III. It is also discernible in scenes of combat on signet rings.² On the other hand, the existence at Knossos of a type with more strongly accentuated shoulders, and apparently intended to represent the fully developed horns, is

Horned sword of Goddess on seal-stone.

demonstrated by the remarkable flat-cylinder bead-seal of cornelian, found with a hoard of bronze vessels and a painted ewer of typical L. M. I *a* style near the 'Stepped Portico' where the Goddess holds a horned sword as the symbol of her temporal dominion.³

The first actual specimen of the kind from Knossos occurred in an isolated chamber tomb, the base of which had come to light in the course of tillage on the ridge West of the Palace. The deposit contained the remains of the greater part of one horned sword and the tip of a 'horn' of another, besides three spear-heads, and with them was a flat painted 'aryballos' with 'canopy' decoration of the L. M. I *b* class.⁴ The swords belonged to the early phase of the last Palatial Age (Fig. 832).

L. M. I *b* horned sword from Knossos.

Of a fully developed dagger-hilt of this kind with ivory plating a good example was found in the 'Tomb of the Tripod Hearth' at Zafer

Later specimens from Zafer Papoura tomb.

sword with the galloping horses (see p. 832, Fig. 812, above).

¹ Pt. I, p. 254, Fig. 190.

² E.g., the gold signet-ring from Grave IV (Karo, *op. cit.*, *Atlas*, Pl. XXIV, 241), and gold bead-seal from Grave III (*ib.*, Nos. 33, 35). See, too, Dr. Karo's observations, *op. cit.*, *Text*.

³ *P. of M.*, ii, Pt. II, p. 793, and Fig. 517,

and see below, p. 937 and Fig. 907.

⁴ The objects, which were acquired some years since from their owner, are now in the Ashmolean Museum. The original length of the sword, with the tip and tang restored, would have been as nearly as possible 77 cm. The width between the points of the horns is 8.7 cm.

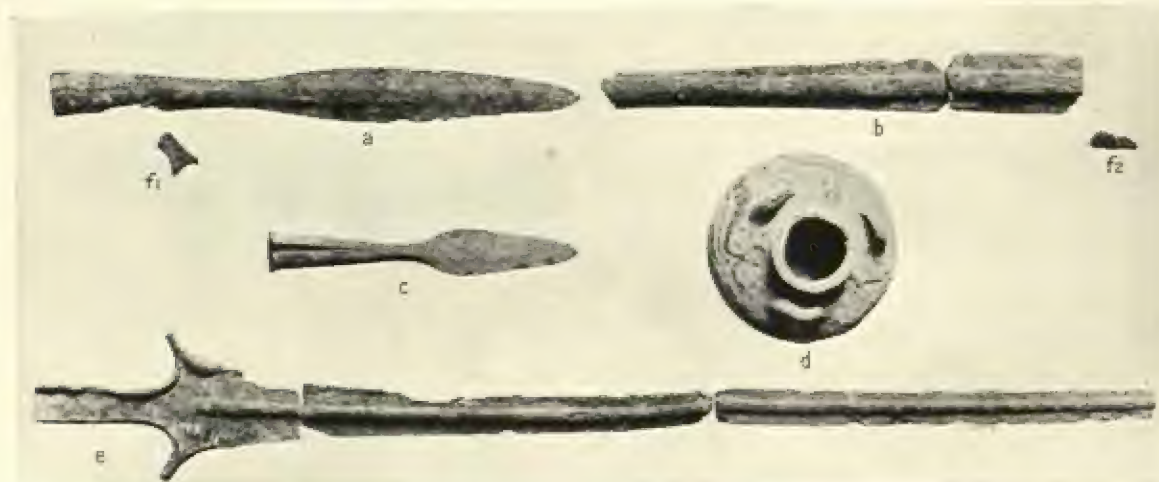


FIG. 832. OBJECTS FOUND IN BASE OF DESTROYED CHAMBER TOMB, KNOSSOS: *a, b*, SPEAR-HEADS; *c*, JAVELIN HEAD; *d*, PAINTED CLAY 'ARYBALLOS' (L. M. I *θ*); *e*, 'HORNED' SWORD; *f* 1-2, 'HORN' AND POINT OF ANOTHER.

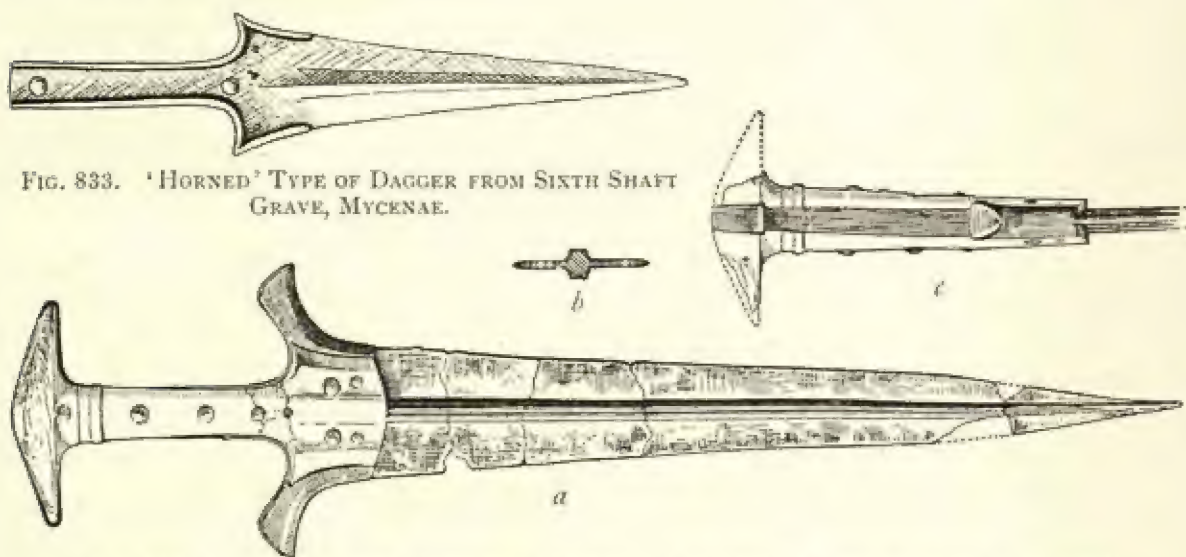


FIG. 833. 'HORNED' TYPE OF DAGGER FROM SIXTH SHAFT GRAVE, MYCENAE.

FIG. 834. IVORY MOUNTED DAGGER OF 'HORNED' TYPE FROM 'TOMB OF TRIPOD HEARTH', ZAFER PAPOURA (*b*, SECTION; *c*, SIDE VIEW OF HILT).

Papoura, belonging to about the close of the Palace period¹ (Fig. 834, *a, b, c*). A long sword of the horned type, illustrated below,² was found, together with a magnificently adorned cruciform example, in the 'Chieftain's

¹ A. E., *Preh. Tombs of Knossos*, i, p. 43, and Figs. 39 *a*, 39 *b*.

² See below, p. 865, and Fig. 849.

Grave' of the same cemetery, but the finest specimen of all—a metre in length—was that discovered by the Swedish explorers in the Royal Tomb at Dendrâ.¹

Dendrâ specimen.

The 'Cruciform' Sword-type.

The most characteristic of the late Palace sword-types is that to which

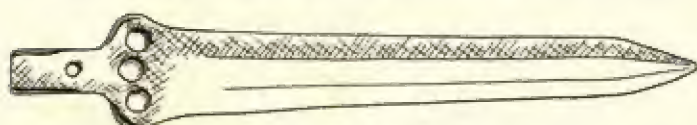


FIG. 835. SWORD TYPE, L. M. I a, FROM GOURNIÀ :
PROTOTYPE OF CRUCIFORM SWORD.

the name 'cruciform' sword-type—characteristic of late Palace. may be conveniently given from the prominences on either side of its hilt. This class of swords is

pre-eminently Cretan and specially characteristic of the late Palatial deposit.

The 'cruciform' type is not represented among the swords from the Shaft Graves, which argues for it a somewhat later date. At the same time, the continued vogue of the 'horned' variety overlaps its use. In the 'Chieftain's Grave' at Zafer Papoura, for instance, this old-established 'horned' type serves for a long sword. The 'cruciform', like the horned type, is demonstrably of Cretan origin.

Not found in Shaft Graves.

It is clear, indeed, that swords of this form find their immediate antecedent in what seems to have been the typical dagger of the L. M. I a Period, well illustrated at Gournià (Fig. 835).² Here we have the same general type as that represented by the early inlaid dagger from Lasithi,³ but with its shoulders still more laterally developed and accompanied as there by a low flange.

The 'cruciform' type, which is absent—whether as regards daggers or swords—in the Shaft Graves of Mycenae, makes its appearance on that site in the immediately succeeding epoch. It is there found for the first time in a deposit, the Cretan and, indeed, specifically Knossian associations of which

Evidence of cruciform type from later Tomb, Mycenae.

¹ A. W. Persson, *The Royal Tombs at Dendrâ, near Midea*, pp. 35 and 36, and 60-2, Pl. XX, iii.

² Boyd-Hawes, *Gournià*, p. 34, and No. 50. It is there classed as the typical 'short sword', but in the present work the term 'sword' is confined to weapons of 50 or more centimetres in length. See, too, the useful dissertation of

IV*

Dr. A. E. Remouchamp, of Ghent, *Griechische Dolch- und Schwerterformen (Inaugural Dissertation, Albert Ludwigs Universität, Freiburg 1926)*, p. 9, Fig. 13 (unfortunately taken not from the *Gournià* plate, but from a bad photograph, which fails to show the lower studs).

³ *P. of M.*, i, p. 718, Fig. 541, a, b.

are well established, contained in a chamber tomb of what has been termed the 'Third Kilometer Cemetery'.

Tomb,
perhaps,
of Knos-
sian war-
rior.

Among many interesting relics from this interment—including gold jewels in the shape of argonauts and butterflies, and numerous vessels of steatite and alabaster—were two painted 'amphoras' already illustrated,¹ belonging, down to details of their decorative features, to a Cretan class that represents the incipient stage of the 'Palace Style'. The further occurrence in this deposit of a hilt-plate in pale faïence (Fig. 836)² belonging to a sword of the 'cruciform' type is specially important from its association with proofs of Knossian connexion.

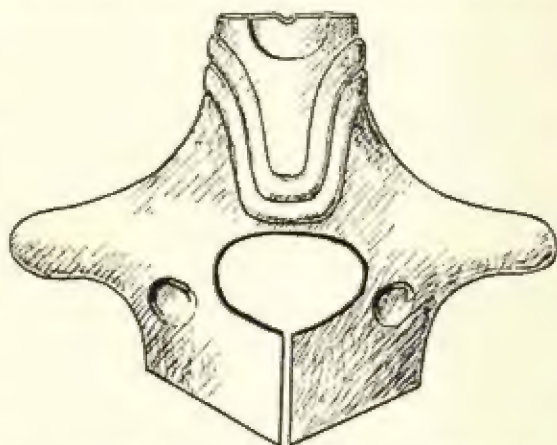


FIG. 836. FAÏENCE HILT-PLATE OF CRUCIFORM TYPE FOUND IN CHAMBER TOMB, MYCENAE, WITH 'PALACE STYLE' AMPHORA.

The pale faïence of the hilt-blade itself answers to the Palace fabric, and, with the deposit, were also found inlays presenting incised marks on their lower surface, some of which, such as the A, correspond with similar marks on inlays from the 'Room of the Throne' at Knossos.

This Cretan warrior's grave, for such we may regard it, making its appearance at Mycenae and at this particular time, is of extraordinary historical suggestiveness when we recall the cumulative proof to which attention

¹ See R. C. Bosanquet, *J.H.S.*, xxiv (1904), p. 323. For one see p. 282, Fig. 216, above (cf. Bosanquet, *op. cit.*, Pl. XII, restored under Sir John Marshall's direction), also p. 322. For the other see p. 321, Fig. 262 above, and D. Mackenzie, *The Pottery of Knossos: J.H.S.*, xxiii (1903), p. 102, Fig. 10 (also as restored under Sir J. Marshall's direction). Dr. Mackenzie recognized the Knossian fabric of both vases. They are described above as transitional L. M. I b-L. M. II, and assigned to their place at the head of the 'Palace Style' class. Bosanquet, *op. cit.*, p. 322, points out that their clay answers to that of the Palace Style 'amphoras' of Knossos, and adds that

'it is safe to declare that they had been painted at Knossos'.

² Tsountas' statements about this and the onyx hilt-plates found in Mycenae tombs are confused and self-contradictory. Prof. Wace, who has carefully gone into the matter, kindly informs me that the tomb containing the two 'amphoras' and the faïence hilt-plate was No. 102 of the 'Third Kilometer Cemetery'. Another faïence hilt was found by Tsountas on the acropolis of Mycenae, but the evidence of its ceramic associations is still to seek. See, too, Wace, *Chamber Tombs of Mycenae*, p. 3, Fig. 1, and note 2.

has already been called above, of a dominating influence exercised by Knossos during the succeeding Age throughout Mainland Greece.

Apart from the evidence supplied by this sepulchral group, and one or two other more or less contemporary sword-plates, the fullest material for examples of the 'cruciform' type is supplied by the Zafer Papoura Graves.¹ Five specimens were there brought to light in associations connecting them with the L. M. II Period or the earliest phase of L. M. III, to which an Ialysos example² may also be referred. Of the importance of this type at the close of the Palatial Age an interesting record has been preserved in a fragment of the crystal hilt described below,³ found near the deposit of 'Sword Tablets' and practically identical with the faience type, Fig. 836, as well as on the 'Sword Tablets' themselves.⁴

'Cruciform' swords from Zafer Papoura.

As already noted in the case of the known examples of hilt-plates belonging to swords of the 'cruciform' class, a modification has taken place in the form of the central opening. The earlier 'kidney-shaped' outline of this, as noted above, has now become practically oval.

The 'Sword Tablets'.

In the South-West corner of the 'Domestic Quarter', above the later plaster floor of a small passage that runs between the 'Shrine of the Double Axes' and the outer wall to the West of it, was brought to light a deposit of two classes of inscribed tablets. One of these groups presented lists of men analogous to that of the Great Tablet, Fig. 686, above. A well-preserved clay sealing associated with these, impressed with a couchant lion and countermarked with a 'man' sign, had evidently served to secure the chest containing them.⁵

Deposit of 'Sword Tablets'.

The most important group of tablets here brought out, which have given their name to the whole deposit, presented pictorial designs of swords. With these also were sealings, originally attached to their chests, including one representing a kneeling bull.

The whole of these appeared together with the charred remains of the chests, and had evidently been precipitated on to the level on which they

¹ See A. E., *Preh. Tombs of Knossos*, No. 36, p. 53 seqq. ('Chieftain's Grave'), l. 61 cm. (with pommel), No. 42, p. 59 seqq., l. 58 cm., No. 43, p. 61, l. 50 cm., No. 55, pp. 66, 67, l. 63 cm., No. 98, p. 86, l. 61 cm.

² See below, p. 854.

³ See below, pp. 854-7.

⁴ Maiuri, *Ialysos*, p. 117 (189), Fig. 124 from Tomb XLV.

⁵ The form of the 'man' sign on this sealing recalls that given in Fig. 688, p. 706 above as characteristic of a special class of tablets. It supplied valuable evidence of contemporaneity.

were found from a store-room immediately above, overlooking the South-Western entrance passage of the Central Court. This store-room must have opened on the upper landing of the Entrance Staircase of the

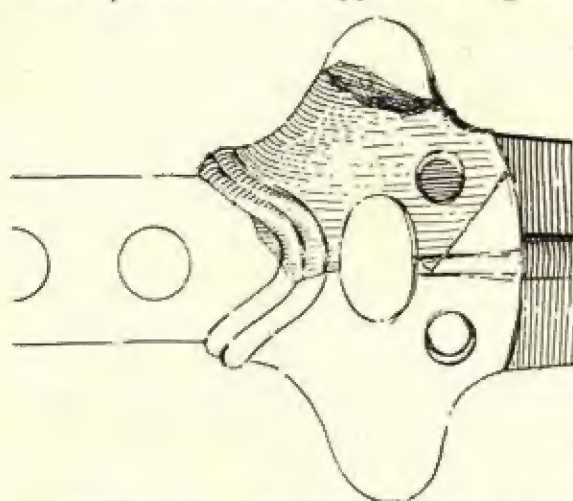


FIG. 837. CRYSTAL SWORD HILT OF 'CRUCIFORM' TYPE (RESTORED) FOUND NEAR DEPOSIT OF 'SWORD TABLETS'.

Domestic Quarter on that site,¹ and would therefore have been of exceptionally easy access. As supplying a chronological *terminus a quo* for the 'Sword Tablet' Deposit, it is of interest to note that, below the later plaster floor, on which these remains were found, and immediately above the original limestone paving of the Corridor, painted pottery came to light of the mature L. M. Ia class, including a small high-spouted ewer with spiraliform decoration identical with that of vases from the Deposit beneath the later pavement of the Eighteenth Magazine,² and of many examples from Gournià,³ as well as of a 'rhyton' from the Second Shaft Grave of Mycenae.⁴ On the other hand, the relative date of the 'sword tablets' was still further fixed by the occurrence in the overlying stratum—separated from them by an earth deposit about 25 centimetres thick—of sherds belonging to the same mature L. M. III a class as the pottery within the neighbouring 'Shrine of the Double Axes', belonging to the period of Re-occupation.

That stores of the bronze swords themselves were preserved in the vicinity of tablets referring to them—as was the case with bronze arrows—may be gathered from some fragmentary remains found at about the same level on the borders of the Corridor where they lay. These, indeed, seem to have belonged to special weapons of State, for they included—besides pieces of gold plate with minute gold nails, such as are otherwise associated with wooden handles of swords and daggers—a part of a magnificent crystal hilt-plate (Fig. 837). Enough of this was preserved—including the double raised

Part of crystal hilt-plate found near.

¹ See plan, Vol. II, Pt. 1, p. 329, Fig. 186.

² See pp. 264, 265 above.

³ E.g., Boyd-Hawes, *Gournià*, Pl. VII, 41, and *passim*.

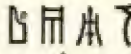
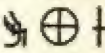

⁴ See p. 271, Fig. 201 above, and cf. Karo, *Schachtgräber*, Pl. CLXX, No. 221; *Text*, p. 70, 'Gute echt minoische Ware'.




FIG. 838. SPECIMENS FROM DEPOSIT OF 'SWORD TABLETS'.

loop at the base of the handle and over half of the oval opening in the centre—to show that this had formed part of the attachment to a sword of the 'cruciform' type. As in the case of the faience example from the Mycenae tomb (Fig. 836), there was a sunken circle, which had doubtless been filled by a small disk of gold plate, imitative of a nail head.

Royal
officer's
name on
'Sword
Tablet'.

Illustrative specimens of these tablets are given in Fig. 838. Though the sword itself does not come within the part preserved of Fig. 838, *f* and *g*, found with the others, it will be seen that the inscriptions fit on to those of the completed examples. That of *g*, which must be taken also to supply the full form of *f*, , is of interest from the fact that it begins with the 'throne and sceptre', and may therefore be regarded as representing the name or title of a royal officer. The initial group of *e*,  corresponds with a similar group on a tablet from the East-West Corridor Deposit,¹ almost certainly to be interpreted as a man's name. The terminal sign  indeed is, as has been shown,² specially characteristic of masculine names.

Tablet
referring
to the
store of
50 swords.

On the other hand, we must clearly recognize in the group , in large characters at the beginning (Fig. 838, *a*), a regular formula of addition, observable, as already noted, on a series of tablets.³ This indication indeed, besides appearing before the 'banner' sign followed by numbers, is also seen as here in large characters in the initial space of a tablet preceding three lines of lower sign-groups referring to separate reckonings. It is to be noted, moreover, that while in other specimens where the numbers are given, these are confined to units—2 or 3—the tablet Fig. 838 *a* refers to a comparatively large store of fifty swords.

Types of Swords represented on Tablets.

Sword-
types on
Tablets—
occasional
'leaf-
shaped'
outline.

The sword-forms presented by the tablets of this Deposit fall into two main classes, as shown in the generalized reproductions in Fig. 839, *A* and *B*. The earliest type is clearly to be found in Fig. 839, *A* 1, which is simply an elongated version of the old triangular, square-headed dagger-form of the Hieroglyphic series,⁴ closely parallel with the Egyptian sign. The square-headed form itself answers to that of some of the earlier sword-types. The variant version, Fig. 839, *A* 2, is due to the natural desire to depict a larger and more attenuated blade, to indicate a sword, in fact, rather than a dagger.

In two varieties of Type *B*, on the other hand, the blades of which show a certain relation to *A* 2, are distinguished by double semicircular projections at the base which may reasonably be regarded as due to the reflection of the late Palatial 'cruciform' sword. We may regard *B* 1, where the hilt is clearly developed, as including an attempt to indicate its plate.

¹ No. 1435 in my hand-list.

² See above, p. 714.

³ See above, p. 693, and Fig. 679.

⁴ See *Scripta Minoa*, i, p. 186, No. 14.

The approach to the leaf-shaped form of blade, distinctly perceptible in B 1,¹ itself suggests interesting comparisons. As applied to swords, the leaf-shaped blade, with its outline expanding towards the centre of its length, answers to a very late type and to a date when the weapon was used more for cutting strokes than for the thrusting action for which it was apparently exclusively used in Minoan times.² The expansion of the central section of the blade cannot therefore be held as evidence either for the existence of swords of the leaf-shaped class in Minoan Knossos, or a reason for assigning an exceptionally late date for the 'sword tablets' themselves.³

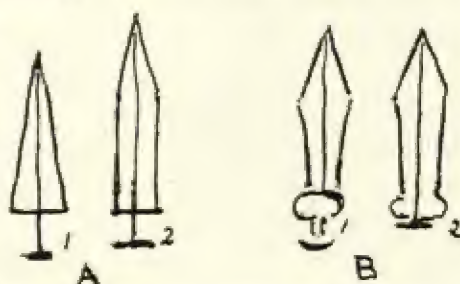


FIG. 839. SWORD TYPES ON TABLETS.

It may be observed, however, in this connexion, that a dagger blade from Grave 86 at Zafer Papoura, Fig. 840,⁴ is of 'leaf-shaped outline, and from its fine fabric should be naturally referred to



FIG. 840. LEAF-SHAPED DAGGER: ZAFER PAPOURA.

L. M. II, though the Chamber Tomb in which it occurred had been plundered, and much ruined, and direct evidence of date was not forthcoming. This leaf-shaped form is also known among Sicilian Bronze Age daggers.

Evidence of Weapons mainly supplied by Tombs: not affected by Form of Burial.

Such stores of arms that may have rested within the Palace at the moment of its final catastrophe were no doubt in the main extracted from the ruins at an epoch when the record of them was fresh. Apart from the tablets, our source of knowledge as to the weapons then in vogue is, as in the case of much of the earlier material of the kind, practically confined to the tombs.

It is clear that, so far as concerns the forms of sepulture there, Minoan

¹ Compare, especially, Fig. 838 b, c.

² See my remarks, *Preh. Tombs of Knossos*, i, pp. 502, 503.

³ In *Scripta Minoa*, i, p. 55, I had been inclined, chiefly on the ground of the leaf-shaped form of some of the swords on these tablets, 'anticipating that of the Early Iron Age', to assign them to a 'somewhat late phase

of the Minoan Civilization'. Some of the tablets found in the 'Little Palace' were inscribed in a decadent or careless style, but there seems to be no sufficient reason as suggested, *loc. cit.*, to refer to the Re-occupation period.

⁴ *Preh. Tombs of Knossos*, i, pp. 470, 471, Fig. 90: 23 cm. long, the blade is grooved and the handle has a curving flange and a rivet at base.

Great variety of sepulture at Knossos, but cultural contents uniform.

Knossos in its last days presented an abnormal variety of types. Apart from the quite unique Temple Tomb and the corbelled vaults in the style of the Royal Tomb at Isopata, illustrated above, there is evidence of the concurrent existence of three modes of sepulture in ordinary use. These are Chamber Tombs, approached by a *dromos*, Shaft Graves, closed by a slabbing above the actual grave, and the 'Pit-Caves'. In this latter class the lower part of a shaft gave access laterally to a walled-in cavity containing the remains—a kind of burial a good deal rife in the East Mediterranean regions, as, notably, Cyprus, from the earliest metal age.

These various types of sepulture, as seen side by side, and sometimes superposed in the Zafer Papoura Cemetery on the Northern border of the town of Knossos, have from the first given the impression of the co-existence on the site—at least in the later days of its habitation—of more than one distinct ethnic element.¹

Might this heterogeneous origin be reflected in the *peculium* of the dead themselves as associated with these different classes of interment? Were there traces, for instance, of a 'helot' class to whom a 'knight's' equipment was not vouchsafed?

No racial distinction in tomb groups.

Such might well have been expected, but the detailed evidence of the contents of the graves makes this conclusion untenable. Whatever difference had existed in the ancestral stock, we have here to do with a community long welded into a single national type by the unifying process due to the Minoan civilization. No distinction can really be drawn in the tomb groups associated with the various classes of interment. The same types of objects occur indifferently in Shaft Graves, Chamber Tombs, and Pit-Caves alike. In each class, too, we are confronted with the contrasts between comparative wealth and of apparently complete destitution.

Arms indiscriminately deposited in tombs of various types.

So far as the deposition of arms in the tombs was concerned, it was equally exemplified by all classes, though the exceptional liability of the chamber tombs² to disturbance makes it probable that in that case a

¹ See my remarks, *Tombs of Knossos, &c.*, i, pp. 522, 523. The unfavourable action of the 'kouskouras' soil on the skeletons themselves made osteological comparisons difficult throughout in the Zafer Papoura Cemetery and, indeed, elsewhere at Knossos.

² The Chamber Tombs were rendered specially liable to discovery by tomb-robbers both by the existence of their entrance passages and by their occasional falling in. As

family vaults they were open for reinterments on which occasions the more valuable relics of earlier burials—notably metal objects—were often abstracted. About half of the Chamber Tombs explored had been plundered by treasure seekers. In the case of the Shaft Graves the proportion of the robbed interments was one-third, while of the better concealed 'pit-caves' one-fifth only had been plundered.

good deal of this material has been lost. The characteristic 'cruciform' sword type was associated with all these forms of sepulture.

In the Zafer Papoura cemetery—covering the last Palatial phase—

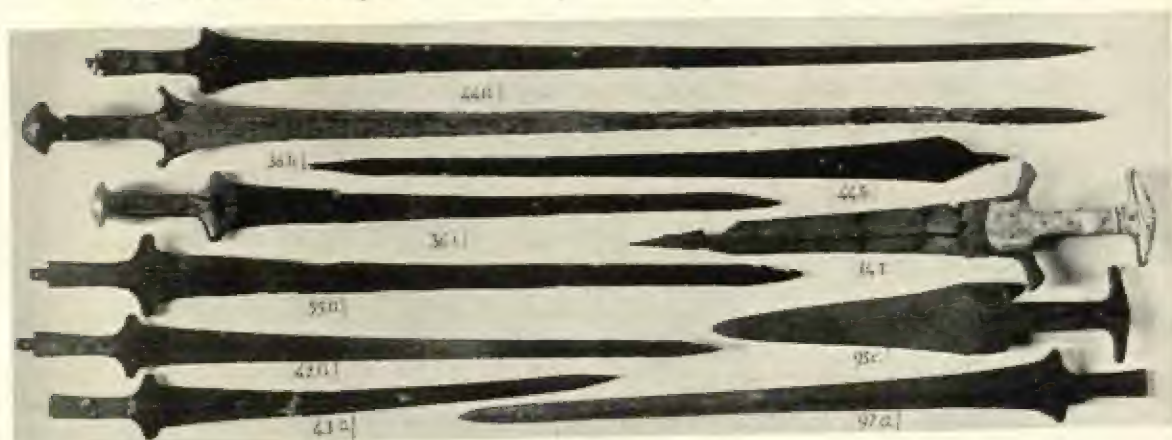


FIG. 841. GROUP OF SWORDS AND DAGGERS FROM THE ZAFER PAPOURA CEMETERY, KNOSSOS.

L. M. II and the initial stage of L. M. III—from about sixty intact tombs, of which a dozen at least contained practically no relics, there were brought out eight swords, three daggers, three long knives, and five bronze spear-heads, an amount of military equipment that certainly contrasts with the later tombs of Mycenae. A group of swords and daggers from this cemetery is given in Fig. 841.

The 'Chieftain's Grave': Upper and Lower Deposits.

From the two tombs of quite royal dimensions brought to light at Zafer Papoura, the gold-mounted arms that had once been laid there had been cleared out together with the other precious objects. The 'Tomb of the Tripod Hearth' at Zafer Papoura which, from its size and stores of bronze vessels, must have contained the remains and belongings of a personage of outstanding wealth, had, so far as its central area was concerned, suffered the same depredation, though a premature falling in of a section of the vault seems to have saved many bronze household utensils that had been placed in one corner. But of weapons there alone remained a bronze lance-head and the ivory-mounted dirk, of the finest fabric, illustrated above in Fig. 834, presenting horned projections like the sword type, both of these relics being included in a secondary deposit, right of the entrance.

So, too, in the 'Tomb of the Double Axes'¹—in its religious interest

The 'Chieftain's Grave': relatively unimportant in size.

¹ See A. E., *Tomb of the Double Axes*, &c., p. 39 seqq.

quite unrivalled—the only evidence of the stately weapons that had once been set beside the body of the personage laid in the rock-cut cist was a knife some 30 centimetres in length with gold-plated rivets,¹ and two large studs, also gold-plated, that had belonged to a sword.

It was, indeed, in a Shaft Grave, the dimensions and method of construction of which closely corresponded with ordinary examples of this class (Figs. 842, 843), that the most princely group of weapons was found.

Upper Deposit of 'Chieftain's Grave'.

The covering slabs of this interment, which has been called the 'Chieftain's Grave'²—themselves exceptionally well cut—were laid, as shown in Fig. 844, on a ledge about three metres below the level of the opening of the shaft, beneath which was the actual grave (Fig. 844), with the remains of the skeleton in the middle. A necklace of gold beads (slightly displaced) had been worn round the neck, and three bead intaglios of agate, onyx, and cornelian lay near the left arm, while to the right of the body lay a long and a short sword, the latter with richly embossed gold-plates on its hilt.

But in this case a novel feature was supplied by the setting out of part of the possessions of the departed warrior on the top of the covering slabs, as shown in Figs 842, 843. These consisted of two spear-heads (see above, Fig. 825, p. 844), the shafts of which must have been broken off, of a bronze ewer with scallop ornament and a two-handled bowl, and a smaller bronze vessel resembling a frying-pan (Fig. 843, c). Besides these there lay here a bronze mirror-plate, the ivory handle of which (like the plates of the larger sword) had perished.

As it is clear that all the objects might have been set in the sepulchral cell itself beside the body, it is natural to seek for some explanation of the division of the properties assigned to the dead into a more secluded and a more accessible group in some aspect of primitive belief. The swords, so

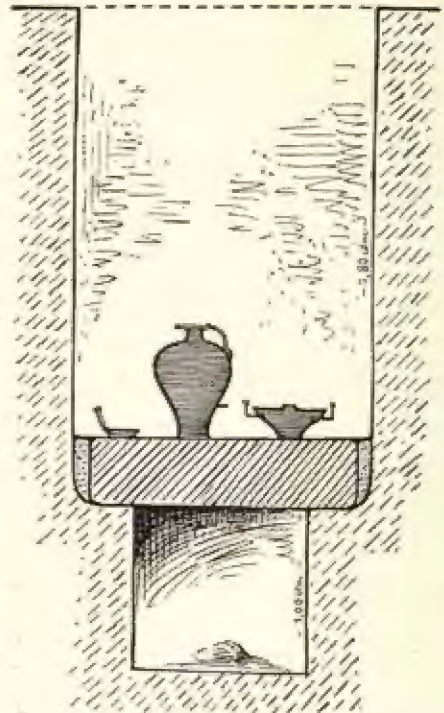


FIG. 842. SECTION OF 'CHIEFTAIN'S GRAVE'.

A typical
Shaft
Grave.

Rich con-
tents.

Vessels
for food
and drink,
mirror,
and hunt-
ing spears
set above
covering
slabs.

¹ *Op. cit.*, p. 42, and Fig. 2 d.

² A. E., *Preh. Tombs of Knossos*, p. 51.



FIG. 843. 'CHIEFTAIN'S GRAVE': RELICS DEPOSITED ABOVE COVERING SLABS.

exceptionally decorated, together with the gold collar—all indicative of his military rank—seem to have been looked on as being immovable as the frame itself. But, for a while at least, the soul, on its shadowy way, might still be thought to revisit earthly haunts and even to indulge in his wonted pastimes. So the mirror was set out in a handier position for his toilette, the ewer for ablutions, and vessels for food and drink. In the lances placed beside these elements of refection we recognize the favourite weapon in use by Minoan sportsmen in the boar-hunting scenes, such as that of which we already see an illustration on the engraved Middle Minoan blade.¹

Lower Deposit of 'Chieftain's Grave'.

The floor of the grave proper lay about a metre below the base of the heavy covering slabs, and, with the skeleton itself, had been placed the relics most clearly distinctive of his rank and military profession—his gold necklace, his long and his short sword. That gold necklaces, like the

¹ *P. of M.*, i, p. 718, Fig. 541, a.

The
'Horned'
Sword.

torques of Gaulish warriors, served as a sign of rank or distinction may be gathered from more than one pictorial and sculptural record. The Priest-king of the fresco is seen to have worn a lily collar matching his crown.¹

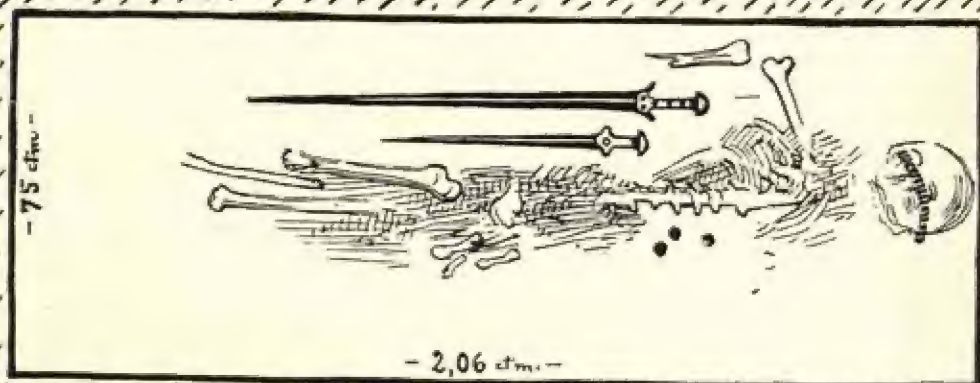


FIG. 844. THE 'CHIEFTAIN'S GRAVE', ZAFER PAPOURA. ARRANGEMENT OF SKELETON AND RELICS BELOW COVERING SLABS.

A beaded necklace with similar armlets is worn by the 'Young Prince' on the Hagia Triada Cup.² In the case of the Chieftain's Grave the necklace consisted of gold beads of a very beautiful design consisting of pairs of Argonauts in opposed positions (Fig. 845). This decorative form of jewel, unknown to the Shaft Graves of Mycenae, makes its appearance in the

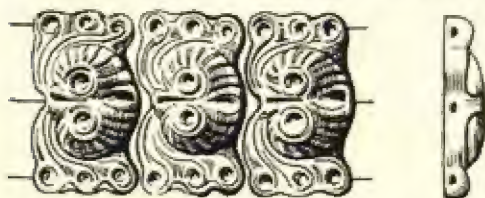


FIG. 845. GOLD BEADS IN THE FORM OF PAIRS OF ARGONAUTS, WITH SECTION OF ONE.

late days of the L. M. I 'Marine' style³ (of which it is the reflection in metal-work) and was popular throughout the late Palatial Age and the earlier phase of L. M. III alike in Crete and on the Mainland side. The unknown personage, at once apparently warrior and priest, of the Tomb

of the Double Axes, had worn a similar collar, of which, however, only two

¹ *Ib.*, ii, Pt. II, p. 775 seqq., and Fig. 508.

² *Ib.*, p. 791, Fig. 516.

³ As, for instance, in the Mycenae Grave referred to p. 852, n. 1 above (cf. *J. H. S.*, xxiv,

p. 324, Fig. 1, a), containing the fine 'Palace Style' Vases, transitional between L. M. I b and L. M. II. In L. M. III this argonaut design is taken over on to plaques of glass paste.

beads had escaped the plunderer.¹ The fine 'Palace Style' vases of the latter deposit afford sufficient evidence as to the date, and supply at the same time a chronological basis for that of the 'Chieftain's Grave'. That the Argonaut was at this time a favourite decorative motive at Knossos is shown by the painted fragment of a fine example from a frieze of the 'Domestic Quarter' of the Palace.²

Richly Mounted 'Horned' and 'Cruciform' Sword from 'Chieftain's Grave': Gold Plate with Engraved Designs.

Of the two swords from the 'Chieftain's Grave' the 'horned' sword (Fig. 846) is 94.5 centimetres (30½ inches) long without the pommel.³ It thus exceeds all known examples of that class with the exception of the magnificent specimen from the Royal Tomb at Dendrà, the blade

Gold necklace: Minoan sign of rank.

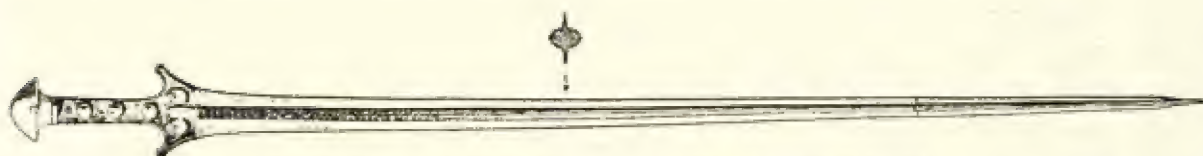


FIG. 846. 'HORNED' SWORD FROM 'CHIEFTAIN'S GRAVE'.

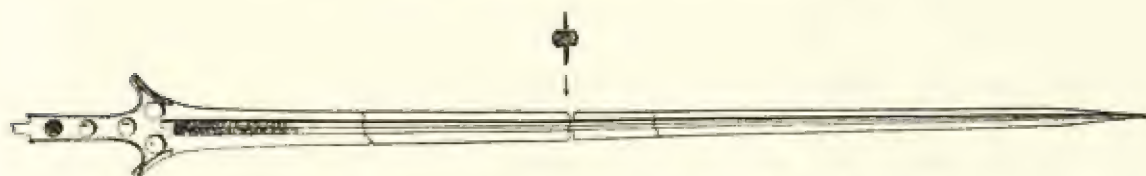


FIG. 847. 'HORNED' SWORD FROM GRAVE 40, ZAFER PAPOURA.

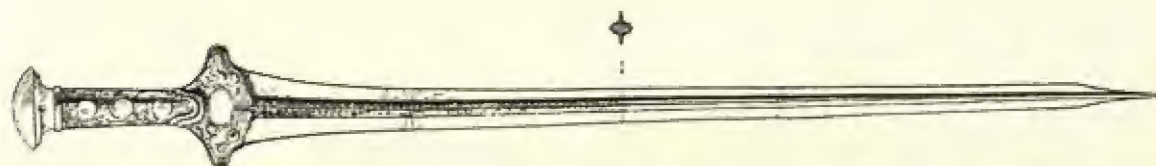


FIG. 848. 'CRUCIFORM' SWORD WITH ONYX POMMEL AND ENGRAVED GOLD PLATES, FROM 'CHIEFTAIN'S GRAVE'.

¹ *Tomb of the Double Axes*, &c., p. 45, and Fig. 59.

² See below, p. 891, Fig. 871.

³ The longest sword from the Mycenae

of which was a metre in length.¹

It will be seen from Fig. 849, *a*, *b*, that part of the sharply carinated ivory pommel was preserved, but though the gold-plated rivet-heads remained, the hilt-plates, probably of the same material, or wood, had decayed away. These, originally, as in other cases, may have been inlaid with gold pins. The midrib of the blade was decorated with double lines of running spirals in relief. As will be seen from Fig. 850, placed here for comparison, this horned sword presents a close resemblance to a similar weapon from

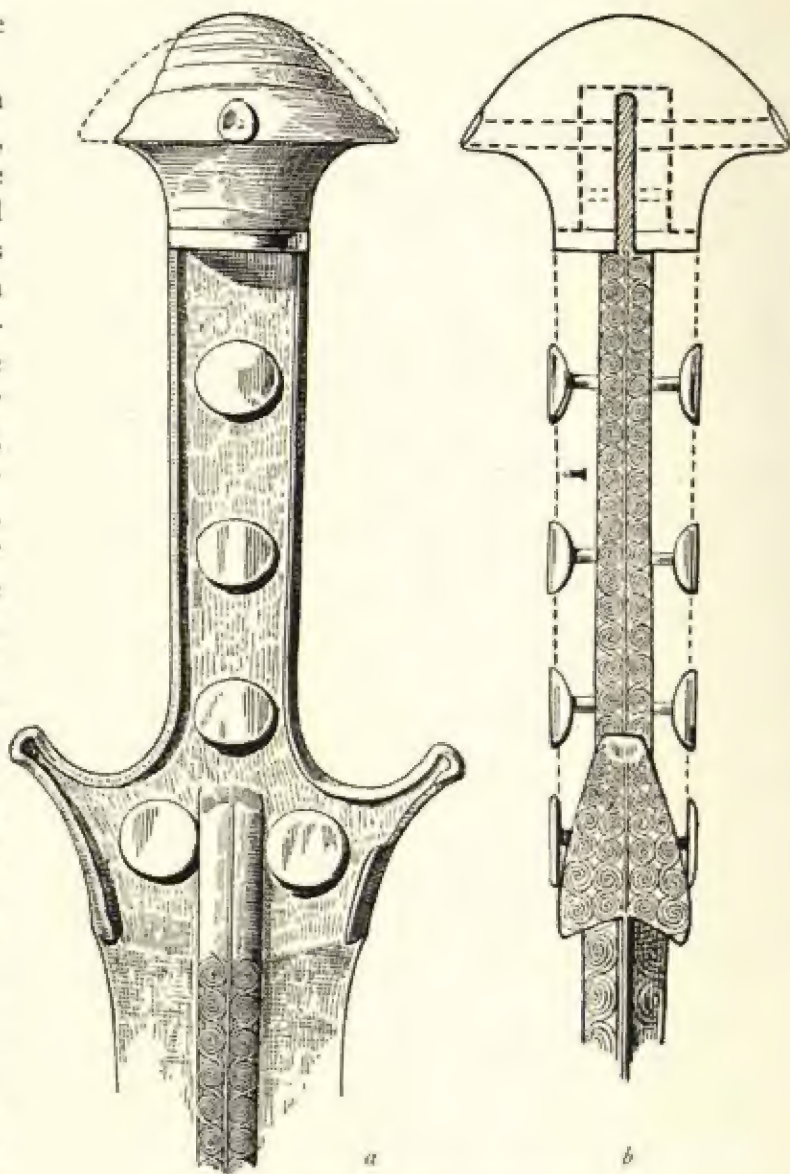


FIG. 849. UPPER PART OF HORNED SWORD FROM 'CHIEFTAIN'S GRAVE', SHOWING GOLD-PLATED RIVETS.

Shaft Graves, a rapier of the round shouldered type, is 95 cm. (Karo, *Schachtgräber*, Text, p. 202, *Atlas*, Pl. LXXX, No. 266.) The examples of the 'horned type from these Mycenaean

Graves such as *op. cit.*, Pl. XCV, No. 905, are decidedly short. The fully developed 'horns' only occur in the case of a dagger (*op. cit.*, Pl. XCV, No. 904). The gold hilt-plate (*op. cit.*, Pl. LXXXI, and LXXXII, No. 725) also belongs to the fully developed form.

¹ A. W. Persson, *The Royal Tombs at Dendra, near Midea* (pp. 35, 36, and 60-2; Pl. XX).

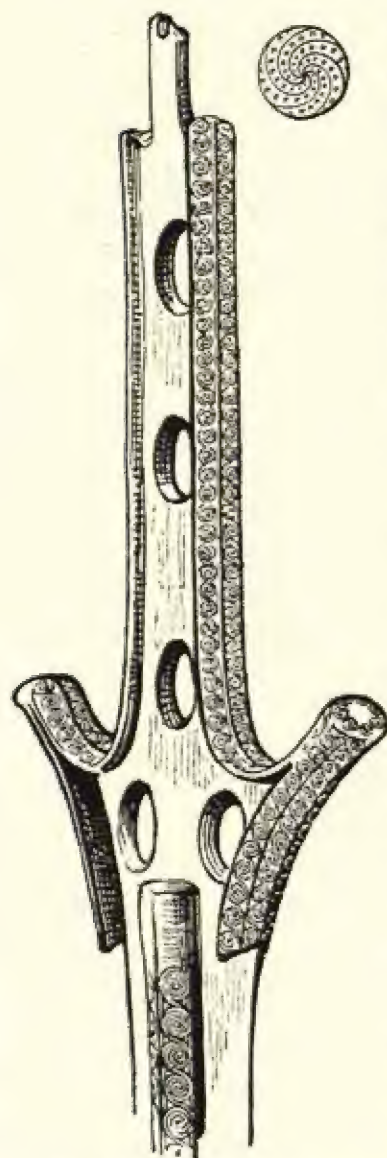


FIG. 850. VIEW OF HORNED SWORD FROM SHAFT GRAVE, No. 44, ZAFER PAPOURA.

the Shaft Grave No. 44 of the same cemetery, in which case the outside of the flange was decorated with the same spiraliform pattern as the midrib. It was 91 centimetres in length.

In the case of the 'cruciform' short sword—61 centimetres in length—found with the other, the adornment of the handle had been of a still richer kind. The pommel is formed of beautifully veined and partly translucent agate, dark brown and crystalline, showing a roll moulding beneath the sharply keeled rim of the boss. It is perforated as usual for attachment to the hilt by a bronze rivet, and its base is surrounded by a gold ring. (See Figs. 848 and 851, *a*, *b*.)

Cruciform sword with agate pommel and gold-plated hilt.

The flanges and mid-rib bear the same spiraliform decoration as the 'horned' longsword. The gold hilt-plates, however, are divided by double, curving mouldings into two compartments. On these are successively engraved in each case two scenes of a lion hunting a Cretan wild-goat. These scenes are in places somewhat interfered with by the gold heads of the rivets that attached the plates to the bronze hilt through their thin wooden backing.

On each hilt-plate two engraved scenes of lion hunting wild-goat.

In the lower of these compartments the design is cleverly worked into the two spaces available on either side of its more or less cross-shaped field with its oval opening. Here, to the right, with rocks above and below, we see the lion looking back and apparently first catching sight of his quarry, while to the left, in the same setting, the

agrim), also looking back, realizes his peril and bounds away in headlong flight.

On the casing of the handle above, in the same rocky country but with a bell-shaped flower, apparently a wild tulip—such as still grow in a neighbouring glen beneath the western steep of Juktas—we witness the

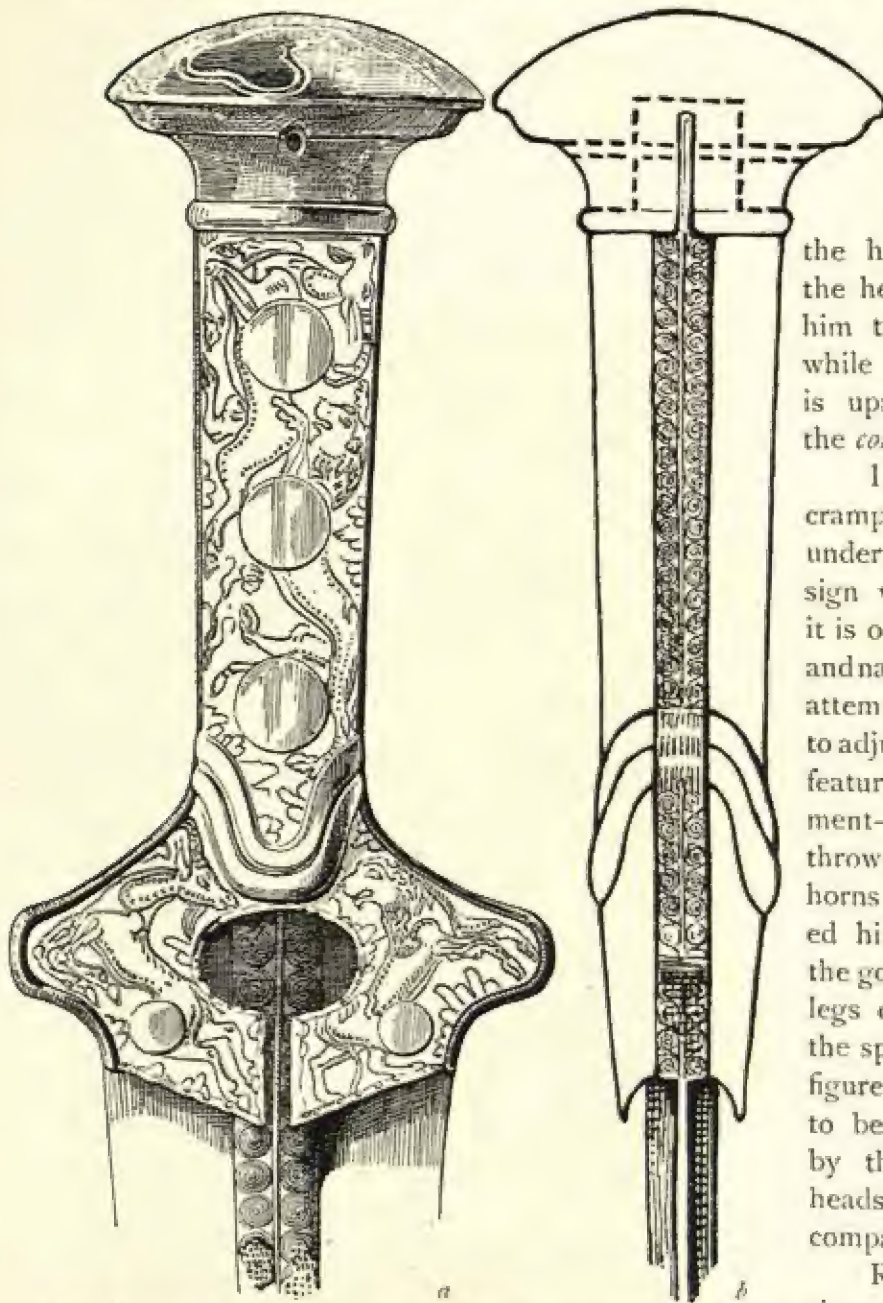


FIG. 851. UPPER PART OF 'CRUCIFORM' SWORD FROM 'CHIEFTAIN'S GRAVE' SHOWING ONYX POMMEL AND GOLD PLATED HILT WITH ENGRAVED DESIGNS OF LION AND WILD-GOAT ($\frac{1}{2}$).

this near the upper part of the midrib of the blade are reproduced and enlarged to two diameters in Fig. 852.

end of the chase. The lion, with a final spring, has gripped with one paw

the hindquarters of the he-goat, bearing him to the ground, while the other paw is upraised to deal the *coup de grace*.

In spite of the cramped conditions under which the design was composed, it is of singular force and naturalism. Some attempt, too, is shown to adjust certain main features in its movement—such as the thrown back neck and horns and outstretched hindmost leg of the goat and the hind legs of the lion—to the spaces where the figures were bound to be partly effaced by the large rivet-heads of the upper compartment.

Remains of linen tissue are seen attached to parts of the blade. Fragments of

The skilful fabric of this truly royal weapon, down to its minutest details as well as the spirited engravings supply one out of many proofs of the high level still maintained in the minor Arts and Crafts throughout the last Palatial epoch.



FIG. 852.
PART OF MID-RIB
OF 'CRUCIFORM'
SWORD, SHOWING
REMAINS OF LINEN
TISSUE (3).

The Minoan Helmets.

It is to be noted that on the 'Armoury' tablets, helmets—so conspicuous, as executed in metal, amongst the remains of later antiquity—are not in evidence. The non-inclusion of these with metal arms is natural, since the early head-pieces of Cretan warriors

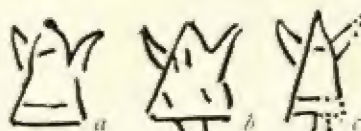


FIG. 853. HORNED HEAD-PIECES ON M. M. III^a TABLET, MALLIA.

were of leather or of some padded stuff, with horizontal ridges. We have seen that peaked helmets of this kind adorned with horns supplied the origin of a Cretan linear sign which, in a semi-pictorial form, already appears on inscribed clay bars of



FIG. 854. ZAKRO SEALING:
PLUMED HELMET BESIDE FANTASTIC HUMAN FIGURE.

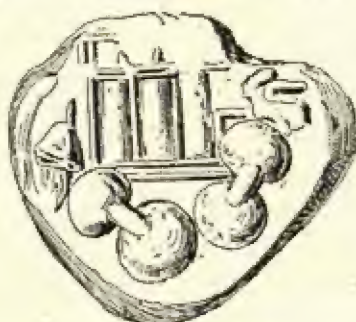


FIG. 855. ZAKRO SEALING:
PEAKED HELMET WITH
CHEEK-PIECES AND SHIELDS,
BESIDE BUILDING.



FIG. 856. SEALING FROM
H. TRIADA: HELMET WITH
CURVED CREST AND ROWS OF
BOARS' TUSKS.

Mallia,¹ going back to the earliest phase of M. M. III, Fig. 853, *a, b, c*. These, which are the lineal predecessors of the helmet seen on the porcelain relief and Vapheio gem (Figs. 858, 859), already show traces of the chin straps, and the rows of boars' tusks have left their traces in the case of *b*. A conical head-piece provided with what we may suppose to have been a horse-hair plume is seen on a Zakro sealing (Fig. 854) beside a fantastic female bust with a blurred, possibly bovine, head, which already shows between its horizontal ridges, curved indications of similar tusks. The same type is seen, better

¹ See above, pp. 688, 689.

illustrated, on a relief from the large silver vase of the Fourth Shaft Grave (Fig. 857).¹ This late M. M. III *b* example in turn leads us to the design on a

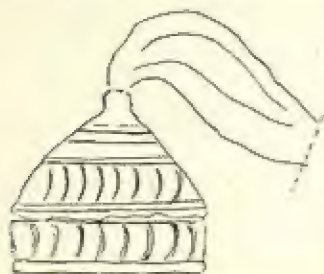


FIG. 857. HELMET SHOWING ROWS OF BOARS' TUSKS AND HORSE-HAIR PLUME. ON FRAGMENT OF LARGE SILVER VASE, FOURTH SHAFT GRAVE, MYCENAE.



FIG. 858. WARRIOR WITH HORNED HEAD-PIECE: FAIENCE RELIEF, MYCENAE.



FIG. 859. VAPHEIO GEM WITH RAM'S HORNS AND ROWS OF BOARS' TUSKS.

clay seal impression from Hagia Triada, Fig. 856,² where the transverse lines of tusks are clearly shown. In this case a tufted, horn-shaped crest appears, which, from its shape and rugosities may be recognized as a ram's horn. The crest of the helmet here recalls that of a warrior on a gold signet-ring from the Fourth Shaft Grave at Mycenae. The Vapheio gem, Fig. 859, shows two ram's horns.

Ear flaps—well known in Late Minoan representations of helmets—already occur on another Zakro sealing, Fig. 855 attached to a conical helmet with a peak,³ a kind of *Pickelhaube*. A similar type is seen on the painted goblet from Tomb V at Isopata, of L. M. I *b* date.⁴ (See Fig. 863 below.)

In the above we may trace the antecedent of a whole series of Late Minoan helmets, many of them already well recorded among the remains of Mycenae and Mainland Greece.

One fact, moreover, should be specially noted. The diagonal markings of the horizontal rows of the head-piece seen on the Zakro sealing, Fig. 854—as probably the sloping lines on a still earlier type from a Mallia tablet⁵—must be taken to show that the boar's tusk decoration, so common on Late Minoan helmet types, goes back in Crete well into the Middle Minoan Age. That they were used for this purpose at Knossos is proved by the occurrence in Tomb 55 of the Zafer Papoura Cemetery—referred to the epoch, L. M. III *a*,

¹ Reichel, *Homeric Wappen*, p. 121, Fig. 38. (In Fig. 857 above, the lower band of the helmet is restored.)

² Halbherr, *Mon. Ant.*, xiii (1903), p. 35, Fig. 27, where the figure was mistaken for a kind of *cornucopia* and placed upside down. (This has also been rightly recognized by

Dr. Doro Levi (*Le cretule di Hagia Triada*, p. 21, Fig. 33.)

³ See *P. of M.*, i, p. 308, Fig. 227, *b*.

⁴ A. E., *Tomb of the Double Axes*, &c., p. 27, Fig. 27 *b*.

⁵ See above, p. 689, Fig. 672, *b*.

immediately succeeding the fall of the Palace—of a series of such plates cut and perforated for attachment,¹ answering in their form to those from the Fourth Shaft Grave at Mycenae, of which two typical specimens, one bored, the other unbored, are given in Fig. 860. A characteristic example of one of these Late Minoan helmets from Mycenae² is shown in Fig. 861.

From the abundant perforated sections of boars' tusks, found in the Mycenae chamber tombs recently published by him, Professor Wace, indeed, using felt for the model, has ingeniously applied the process so as to reproduce the original effect of such a helmet.³ (See Fig. 862.)

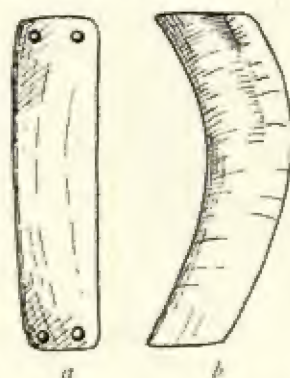


FIG. 860 *a, b*. TYPICAL SECTIONS OF BOARS' TUSKS, AS APPLIED TO HELMETS (FOURTH SHAFT GRAVE, MYCENAE).

Boar-hunting itself, as we see from the engraved dagger-blade of M. M. II date, was early practised in Minoan Crete, and the tusks as trophies of the chase would have been naturally used there for decorating, and at same time arming the head-piece. But it looks as if on the Island the quarry there pursued, with highly perfected weapons, had by Late Minoan times become rarer than in Mainland Greece. On that side, indeed, Late Minoan illustrations of boar-hunting scenes are frequent, including the Tiryns fresco, and 'pig-sticking' episodes on seal types. But on a later ivory relief for inlaying from the West Palace Section at Knossos, otherwise recalling that shown in Fig. 861, circles indicative of applied metal disks are substituted in horizontal bands for the boars' teeth so clearly represented on the other example.

In truth the marshy thickets of many parts of Mainland Greece afford a better habitat for the wild boar than could ever have been found in Crete. In the Island the animal seems to have been long extinct, while in Northern Greece he still affords sport. The Mainland Minoan branch had

¹ A. E., *Preh. Tombs of Knossos*, i, p. 67, Fig. 55*e*. The deposit is dated by a stirrup vase (*ib.*, Fig. 73) showing a foliated band very closely dependent on those of the 'Palace Style' example, Pt. I, p. 275, Figs. 208, 209, above.

² National Museum, Athens, No. 2748, *Reichel, op. cit.*, p. 120, Fig. 37, and Karo *Schachtgräber, Text*, p. 212, Fig. 94. A more

degenerate version of the same type was found in the tholos tomb at Spata (B. Haussoullier, *Cat. des objets découverts à Spata* (*Bull. de Corr. hell.*, ii (1878), Pl. XVIII, 2, &c.) and a very similar relief occurred at Enkomi (*B.M. Excav. in Cyprus*, p. 9, and Pl. ii, No. 1340).

³ *Chamber Tombs at Mycenae* (*Archaeologia*, vol. lxxxiii, 1932), Pl. XXXVIII, and cf. pp. 212, 213.

evidently much better opportunities of indulging in it than were to be found in the earlier hunting ground. The evidence that the earlier Helladic



FIG. 861. IVORY RELIEF OF WARRIOR'S HEAD FROM MYCENAE, SHOWING ZONES OF HELMET AND CHEEK-PIECE FITTED WITH BOARS' TUSKS.

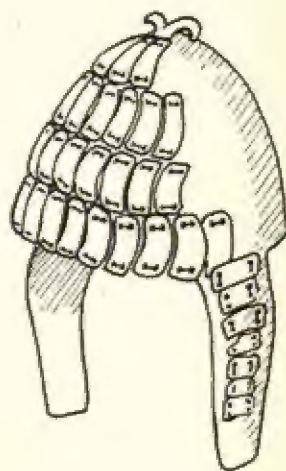


FIG. 862. RESTORED ARRANGEMENT BY PROFESSOR WACE OF BOARS' TUSKS SECTION FROM CHAMBER TOMB AT MYCENAE.

inhabitants had already used the tusks, strung into chains, for necklaces¹ or other personal adornments is not surprising, but their claim to have initiated this use for Minoan helmets must be altogether disallowed. Where they have been found in connexion with indigenous settlements, as at Eleusis² and at Eutresis³ in Boeotia, the bored sections both in shape and perforations absolutely conform to the pattern used for helmets, such as those described, of very ancient Minoan tradition. We have here, indeed, examples of incipient intrusion of Minoan fashions among the representatives of the old race. In view of the facts above stated the suggestion that the adornment and reinforcement of helmets by the

¹ At Eutresis, see Miss H. Goldman's work (cited below), p. 220.

² E. Mylonas, *Πρωτοεποική Ἐλευσίς*, pp. 144, 145 and Fig. 119.

³ Hetty Goldman, *Excav. at Eutresis in Boeotia* (Harvard Univ. Press, 1931), p. 220,

and Fig. 290, Nos. 6, 7, 8, 10, 13 are identical with those used for Minoan helmets both in Crete and at Mycenae, Kakovatos, and other Mainland sites. They belong (as Prof. Wace has demonstrated in a practical manner) to a helmet type with cheek-pieces like Fig. 861.

Minoans was due to some Helladic suggestion¹ must be definitely rejected. The Minoan helmet, with its horizontal bands, with or without the tusks or projecting horns, was, if the evidence here is read aright, of very old tradition.

¹ This suggestion was put forward by Prof. Martin Nilsson, *The Minoan-Mycenaean Religion* (Lund, 1927), pp. 19, 20, as part of his general thesis. Prof. Nilsson, after giving a very complete view of the finds illustrating

this subject in Crete and Mainland Greece at that time available, rightly insisted on the preponderance of these on the Mainland side. But this, surely, was due to greater opportunity rather than to 'difference of taste'.



FIG. 863. PAINTED GOBLET FROM TOMB 5,
ZAFES PAPOURA.

§ 116 A. THE LATEST PALATIAL AGE OF KNOSSOS (L. M. I b—L. M. II),
EARLIER ELEMENTS AND INTERMEDIATE AND FINAL RENOVATION :
'ARGONAUT' FRIEZE AND BULL-SPORT FRESCOES : INTERRUPTED WORK
IN EAST BASEMENTS.

Seismic catastrophe towards close of L. M. I a; Palace restored in L. M. I b style; Older elements inherited from 'Great Rebuilding' of M. M. III b; Survival of High Reliefs; Ceilings with spiral reliefs—XVIIIth Dynasty derivatives; Ceiling fragment with lotus relief from 'Queen's Megaron'—parallel in limestone at Orchomenos; Similar lotus and spiral patterns in the flat succeed these at Knossos and on Mainland sites; Tirynthian and Knossian designs attributed to same hand—typical execution of 'buds'; Flat versions of such designs part of L. M. I b decoration in Palace; Radical reconstitution visible on 'East Stairs'—seismic deposit of L. M. I a pottery beneath them; Other contemporary L. M. I a deposits; Earlier Palace lines largely maintained; Great extension of Processional frescoes in earlier phase of New Palace; Their Egyptian derivation and parallelism with scenes showing tributaries from Keftiu; 'Shield Fresco'—growing Conventionalism and Military parade; Egyptian and Syrian religious influences—the 'Minoan Genii' and the long-robed votaries of Campstool Fresco; Indications of New Dynasty; General unity of latest Palatial culture—illustrated by Deposits; Centralizing and aggressive character of New Régime; Signs of destruction on other Cretan sites and on Mainland side; Did 'Minos II' use black mercenaries there?; Great scheme of renovation in Palace—intrusion of 'Throne-room System'; Incipient redecoration in East Quarter—'Argonaut' frieze; Bull-sport frescoes and 'marbled squares'; Unfinished 'amphoras' in 'Sculptor's Workshop'; General signs of sudden catastrophe.

THIS is the Age marked, as we have seen, in the ceramic field at Knossos by the rise of the 'Palace Style' out of the much more widely distributed L. M. I b, and of its successive stages of development.

As in the case of most of the Minoan Periods, the starting-point of this latest Palatial stage was a widespread ruin, of a seismic nature, which set a term to the preceding L. M. I a phase—itself the sequel of the 'Great Rebuilding' that had followed on to the still greater ruin in the mature stage of M. M. III. In that case the evidence supplied by far-flung blocks still more clearly points to a great earthquake as its primary cause. The last

Seismic
catastrophe
towards
close of
L. M. I a.

ceramic remains of this preceding stage display a fairly advanced L. M. I *a* style and probably belong to the closing years of the Sixteenth Century B.C.

In the Palace, as now restored round about 1500 B.C., the earliest characteristic works represent the then current L. M. I *b* style. On the other hand, apart from the superficial elements of a decorative nature, it seems probable that much of the building, both in its general extent and its arrangement had been inherited from the preceding stage. This was particularly the case in the basement rooms of the 'Domestic Quarter', held together by the 'Great Cutting' in the East Slope in which they were set. These, for instance, largely preserved the high gypsum dadoes of the earlier tradition.

Palace
restored
in L. M. I *b*
style.

To understand the character of the relationship—in some respects so intimate—it is necessary therefore to glance at the Palace as it had taken shape at the time of the 'Great Rebuilding' of M. M. III *b*. The origins of the 'New Palace' as a whole in fact go back to that architectural revolution.

The 'Great Rebuilding' towards the close of M. M. III *b* in its Relation to the latest Palatial Stage.

The 'Great Rebuilding' that took place towards the close of the M. M. III *b* Period was drastic in character, and the interior plan of the Palace was in some respects much improved. The West Porch and adjoining Corridor, later known as the Corridor of the Procession, were reconstructed on more spacious lines, the South Propylaeum, though reduced in width,¹ was restored as part of an equally spacious system, with a stepway ascending to the *piano nobile* and its successive pillar halls. But the chief improvement in the West section was the broadening out of the façade towards the Central Court, which, in the final stage of this restoration, gave room for the later 'Stepped Porch', leading up from the Court to the Central Staircase. All these new features survived to the days of the final catastrophe of the Palace. On the other hand, along the South front there had been at this time a decided shrinkage. Not only was the 'South Propylaeum'

Elements
inherited
from
earlier
phase of
'New
Palace'
dating
from
'Great
Rebuilding'
of
M. M.
III *b*.
Leading
features
of this.

¹ Very full evidence on this point came out regarding the New South Propylaeum where the early cist, overrun by its East wall, was found half full of M. M. III sherds, mostly of the *b* class with no later ingredient (*P. of M.*, ii, Pt. II, p. 701). The latest underlying elements beneath the floor of the later West Porch, another fine structure of the New

Palace, were of the same date (*ib.*, pp. 672, 673). So, too, the elaborate tests made in 1925 and 1926 in the foundations of the later façade West of the Central Court (see *ib.* pp. 802, 803 and notes 1 and 2) showed a pure M. M. III *b* medium, without any admixture of L. M. I *a* sherds.

reduced by about a third in width, but the old line of the 'South Corridor' had been now definitely given up, together with its former entrance system that had afforded access by means of the Portico that wound up the South-Western part of the slope from the viaduct beyond.

Survival
of high
reliefs.

Together with a good deal of the fabric of this restored M. M. III b Palace, certain splendid features in its decoration, executed in relief in painted stucco—the Minoan *gesso duro*, almost as durable as stone—also seem to have lived on in part at least to the latest days of the building. Amongst these may be mentioned the fine bull-grappling reliefs of the Northern Portico, and those, belonging mainly to agonistic scenes, from the East Hall. Remains of both these groups were, in fact, found on levels due to the latest ruin. Reliefs from two decorative ceilings in the same material, resembling one another in their bold and comparatively simple spiral designs encircling 'rosettes', also seem to belong to this earlier phase.¹ These ceilings, with their 'rosettes', derived from the conventional facing lotus flowers of Egypt, clearly represent the reaction of early New Empire models. The fact that these works were in both cases associated with other artistic products of the closing M. M. III b phase affords one of many indications that the end of that Period is appreciably later than the approximate date 1587 when—with the Hyksos subdued and the accession of Aahmes the first King of the XVIIIth Dynasty—the new Egypt was finally consolidated.²

Ceilings
with
spiral
reliefs—
early New
Empire
deriva-
tives.

Ceiling
fragment
with lotus
relief from
Queen's
Megaron.
Parallel
examples
in stone at
Orcho-
menos.

Similar
lotus and
spiral
patterns

A fully developed L. M. I a character must be attributed to the remarkable ceiling fragment found in the Southern light-well of the 'Queen's Megaron' in painted stucco relief, with a lotus pattern in a decidedly advanced *méplat* technique (Fig. 864). It will be seen at once that this corresponds with a well-known class, the classical example of which is the limestone ceiling of the Orchomenos chamber.

The transference of similar schemes to stucco friezes painted on the flat seems on the whole to mark a later stage. Such fresco bands have been well known since Schliemann's publication on the Palace of Tiryns³ and the later discoveries described by Rodenwaldt.⁴ The remains, there

¹ The simplest and boldest of the two groups was found in connexion with the 'East Hall' reliefs. The other, somewhat more elaborate, was from the same area as the 'Miniature Frescoes'. (See *P. of M.*, iii, pp. 30, 31 and Coloured Plate XV.)

² Since time must be given for the reaction of New Empire influences on M. M. III b Art

(already traceable in the 'Temple Repositories'), as well as for the corresponding Minoan reaction on Egypt, it does not seem safe to place the close of what may be definitely described as the M. M. III b stage earlier than c. 1550 B.C.

³ Schliemann, *Tiryns*, Pl. V.

⁴ *Tiryns*, ii, Pl. V, and p. 47 seqq.

from the Early Palace, are closely paralleled at Mycenae¹ and again by specimens from the miscellaneous fresco heap to the North-West of the flat—at Tiryns,

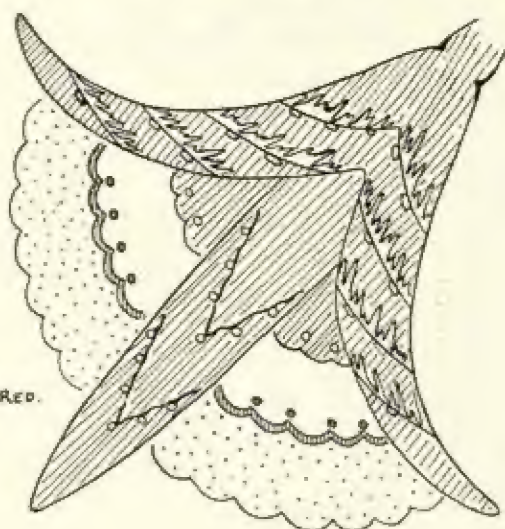
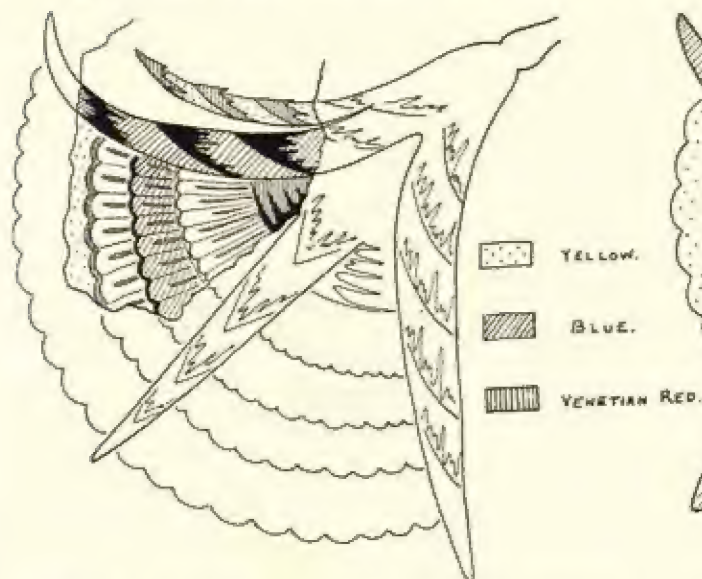


FIG. 864. CEILING FRAGMENT IN RELIEF: PAINTED STUCCO: 'QUEEN'S MEGARON' (DEVELOPED).

FIG. 865. CEILING FRAGMENT: PAINTED STUCCO IN THE FLAT, N.W. HEAP, KNOSSOS.

Palace at Knossos. Of these, Fig. 865² is almost exactly reproduced by the low relief ceiling pattern on the fragment (Fig. 864) associated with the Queen's Megaron. Another piece from the same heap (Fig. 866) stands in the same relationship, though here the sprays are horizontally set. This in turn is inseparable in design from a Tiryns frieze³ (Fig. 867).

The close approximation in the decorative design as seen in friezes from the two Palaces, already noted in the case of Figs. 864 and 865, is here, moreover, enhanced by the insertion in both cases of a detail for which

Mycenae, and Knossos.

Tiryn-
thian and
Knossian
origins by
same
hand.

¹ *B.S.A.*, xxv, Pl. LXIX, reconstruction (from Palace, Mycenae) of section of frieze: Tsountas' excavations, in the Nauplia Museum. Cf. W. Lamb, *op. cit.*, p. 169. Rodenwaldt, *op. cit.*, p. 49 (cf. note 1), considers the fresco not only as contemporary with that of the earlier Palace at Tiryns, but possibly by the same hand as the similar frieze from there.

² In Mr. Fyfe's *Painted Plaster Decoration at Knossos* (*R.I.B.A. Journ.*, 1902), p. 125, Fig. 62, this fragment is drawn as part of the same band as the specimen shown here in

Fig. 866. The colouring is very different, however, and it has been here sketched in another position.

³ Rodenwaldt, *Tiryns*, ii, Pl. vii, 1. Cf. pp. 40-42 and restored drawing, Fig. 11. As compared with the Tiryns fragments that from Knossos was comparatively dull in colouring, a bluish grey being substituted for blue. It looks as if at the time when it was made the Egyptian *kyanos* was becoming rarer at Knossos.

Typical
execution
of buds.

it seems impossible to find a parallel elsewhere. In both cases the outer band of the broad leaf-shaped frame, with its rounded point, is interrupted by

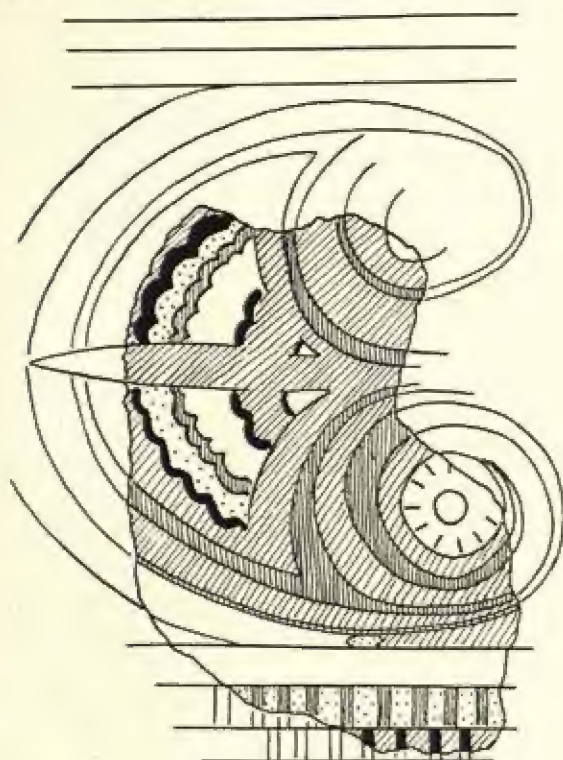


FIG. 866. SECTION OF PAINTED STUCCO FRIEZE (IN THE FLAT): N.W. HEAP, KNOSSOS.

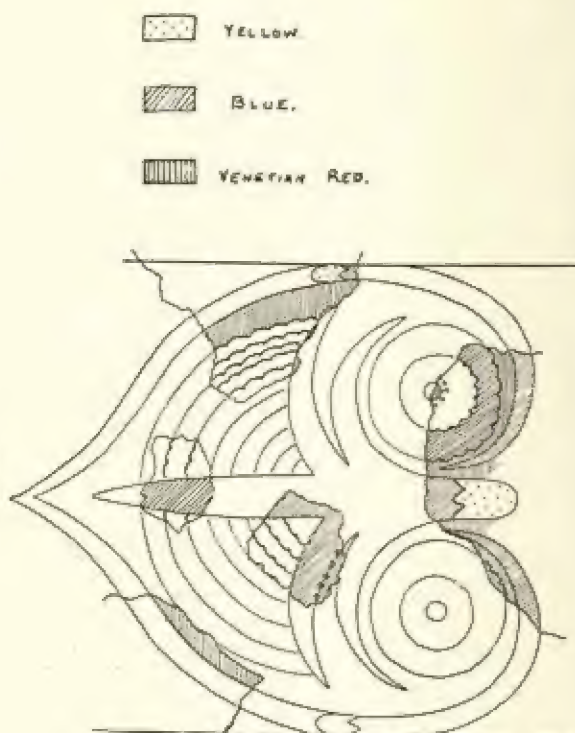


FIG. 867. SECTION OF PAINTED STUCCO FRIEZE: TIRYNS.

what may be described as conventional 'buds', such as may be taken to represent the ends of papyrus shoots. These 'buds', shown in Fig. 868, *a*, *b*,¹ are in both cases coloured yellow, with black borders and markings, and terminate in a similar manner with a zigzag line against the blue continuation of the band beyond. The correspondence thus extends to both of the details and to the triple colour-scheme. It is not, indeed, unreasonable to infer that we have here the work of the same hand.²

May we, perhaps, conclude that there were at this time itinerant artisans belonging to the same guild of decorators who executed works indifferently for the Cretan and the Mainland lords?

In conformity with a general law, it seems best to refer the flat versions

¹ For *a* (from Tiryns) see Rodenwaldt, *loc. cit.*; *b* (from Knossos) represents the upper band in conformity with the Tiryns example.

² This strikingly confirms Rodenwaldt's suggestion (see p. 875, n. 1).

of this old relief pattern to a slightly later date, at Knossos corresponding with the initial stage of the Palace as restored towards 1500 B.C., and corresponding in the ceramic department with L. M. I *b*.

The purple gypsum relief bands with their rosettes and triglyphs, so characteristic of entrance portals throughout the M. M. III Period, were

Flat versions of such painted designs at Knossos referred to L. M. Palace.

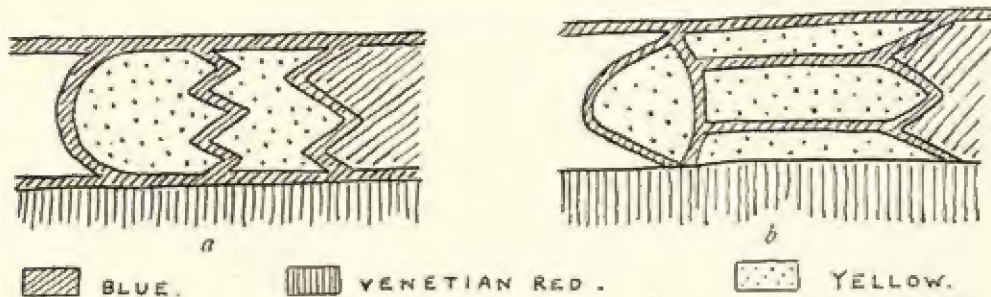


FIG. 868. CONVENTIONAL 'BUDS' ON BORDER BANDS OF 'PALMETTE' FRIEZES :
a, TIRYNS, *b*, KNOSSOS.

also now replaced by similar friezes painted on the flat. A conspicuous instance of this was supplied by the fine painted rosettes with bright red, black, and orange colouring that came to light on the latest Palatial level in the central space of the South Propylaeum,¹ reflecting, as already observed, the noble relief band that had decorated the great Entrance Hall in its earliest form.²

A great use of spiral and rosette bands in a simple style is observable on the walls of the basement halls and passages of the 'Domestic Quarter'. On the other hand, the spiral and rosette pattern on the neck of the Griffin from the 'Room of the Throne', reproduced below,³ shows that such designs continued to be finely executed in the latest Palatial epoch (L. M. II).

To these examples may be added the specimen already illustrated, that was brought to light beneath the superficial layer in the Eastern light-well of the 'Hall of the Double Axes'⁴ and which seems originally to have found a place in the Hall above it. These spiraliform friezes with their 'rosettes' and decorative sprays derived from lotus and papyrus had found their original place above relatively high dadoes consisting of gypsum slabbing.

¹ *P. of M.*, ii, Pt. II, p. 704.

² The allied triglyph and half-rosette band of the North-West Entrance system seems to have been part of the Palace as restored at the time of the 'Great Rebuilding', and may, as

suggested (see above, p. 226), have survived through the last Palatial Age.

³ See below, p. 911, Fig. 884.

⁴ *P. of M.*, iii, p. 295, Fig. 193.

In the case of the basement rooms and passages of the 'Domestic Quarter' this slabbing had largely survived to the last days of the Palace, and had been adapted to what may be regarded as an intermediate system of spiral bands such as we see in the 'Queen's Bathroom'. In the West wing of the Palace, owing to the ruin of the *piano nobile*, the original gypsum dadoes had disappeared and the decorative bands that had run above them were only recoverable from scattered fragments. One record of the older arrangement had been preserved, however, in the entrance passage known from its later decoration as the 'Corridor of the Procession'. At the foot of a wall forming its continuation East, part of one of the original gypsum dado slabs was found adhering to a limestone block of the wall. This was, in turn, covered with stucco belonging to the later system in which the painted designs started from the pavement level, as in the latest Palatial phase.

The Restoration of L. M. I b.

That a very real catastrophe befell the Palace of the 'Great Rebuilding'—the 'Late Palace' in its widest signification—towards the close of its L. M. I a stage may be gathered from many phenomena with which we are now confronted.

Seismic
cata-
strophe
towards
close of
L. M. I a.

For measuring the extent of this catastrophe, which, like those that had preceded it, had been probably of a seismic character, and at the same time for fixing its date, the best evidence is supplied by the upper story of the 'Domestic Quarter'. The damage there was clearly considerable, resulting in the case of the 'Upper East-West Corridor' in structural changes of a radical kind. The passage-way itself, as afterwards reconstructed, was made to run East to a new staircase connecting it directly with the terrace level below. From beneath the 'East Stairs', thus called into existence, a mass of pottery was brought out containing, in addition to some M. M. III elements, such as parts of 'Medallion' *pitthoi*, great quantities of painted clay vessels or their fragments, representing the earlier and the mature stage of L. M. I a. Here, it may be remembered, were found numerous 'flower-pots' of that epoch presenting tufts of reeds or grasses.¹ The contemporary ruin of the Temple Tomb cost human victims.²

Well
illustrated
by 'East
Stairs'.

The hard limestone material of the staircase shows that it was open to the sky, or, at least, exposed to weather conditions. As already noted, the limestone here used, though not otherwise employed in the building, is

¹ See *P. of M.*, iii, p. 274 seqq. and pp. 278, 279, Figs. 186, 187.

² See below, pp. 988, 989.

identical with that of the Porch leading up West from the Central Court to the Central Hall and Upper Staircase on that side. As in that case, too, the last ceramic elements found below the steps were L. M. I a, we must regard the Porch as of contemporary work and as belonging in its present form¹ to the same scheme of reconstruction as the East Stairs.

A parallel indication of change at this epoch was supplied by the contents of a pit near the West wall of the South Propylaeum. This pit seems to have stood in connexion with a small pillar shrine, of which we have the evidence hard by,² and it contained a large deposit of sherds and a votive figure representative of L. M. I a. It would seem that the pit was at this time covered in, and the shrine itself altered or reconstructed. In two cases there is evidence of a change of floor-level. Beneath the later floor of the XVIIIth West Magazine there came to light a small hoard of vases of the mature L. M. I a class on an earlier pavement,³ and the same experience was repeated in the 'Corridor of the Sword Tablets'.⁴

L. M. I a
votive
deposit by
S. Propy-
laeum
ends.

Deposit in
XVIIIth
Magazine.

The Palace as restored early in L. M. I b: its latest phase.

There is, in fact, cumulative evidence of a widespread disaster having befallen the 'New Palace' as it existed in the mature phase of L. M. I a, followed by a good deal of restoration and a partial remodelling, completed in the ensuing L. M. I b stage. As a whole, however, it may be gathered that the Palace as now renovated corresponded in its main lines with the fabric as inherited from the time of the 'Great Rebuilding' of M. M. III b. Some of the masterpieces of painted relief in the Minoan *gesso duro* still clung, as we have seen, to the walls. It is also of considerable importance to observe that the distribution of the clay tablets of Class B—contemporary with the last period of the building and stored in a great number of separate deposits—extended over practically the whole Palace area with the signi-

Palace as
renovated
in L. M. I b.

Wide
range of
deposits
of Class B
Tablets.

¹ For the 'Stepped Porch' see *P. of M.*, ii, Pt. II, pp. 810-13. It would seem a logical sequence of the widening of the façade of the Court on that side, which is shown by concordant stratigraphic data to have been part of the 'Great Rebuilding' of M. M. III b. The evidence afforded by the substructures is extremely difficult to interpret, but there must have been some stepped approach on this side from the Central Court to the *piano nobile* before the construction of the 'Stepped Porch'

that has survived to us. The *tabula rasa* effected somewhat later in the adjoining area to give space for the 'Throne Room' system has, doubtless, destroyed important links in the evidence.

² See on this Part I, above, p. 3 seqq.

³ See above, Pt. I, p. 264 and Fig. 195.

⁴ *P. of M.*, ii, Pt. I, p. 331. The L. M. I a pottery was in a layer 'below the 'Sword Tablets'.

ficant exception of the zone marked by the original South Corridor that went out of use at the time of the 'Great Rebuilding'. In the area, indeed, occupied by the 'Throne Room' system the internal arrangement was wholly revolutionized, as will be shown, in the last days of the Palace.

Greater
conven-
tionalism
in decora-
tive style.

As compared with the great artistic traditions, such as characterized the preceding Palace stage that resulted from the 'Great Rebuilding', the new work takes a severely regulated shape. Lost is the free spirit that had given birth to the finely modelled forms of the athletes in the East Hall groups and to the charging bull of the North Portico. Vanished is the power of individual characterization and of instantaneous portraiture that we recognize in the lively Miniature groups of the Court Ladies.¹ Departed, too, is the strong sympathy with wild Nature, still visible in the flowering plants with their rock setting as seen in the 'House of the Frescoes'. Some survival of this spirit may still indeed be traced in the gem-engravers' Art, and as the examples of 'Palace Style' of Vase painting sufficiently show, these were the days of supreme decorative effort.

Proces-
sional
scheme
derived
from
Egypt.
Parallel-
ism with
scenes of
tribu-
taries
from
Keftiu.

A sacral and conventional style now prevails—the upgrowth of which we already trace in the earlier phase of L. M. I—due to the continued reaction of influences from New Empire Egypt.

Grandiose conceptions, however, also came from that side, as is best shown by the wholesale adoption, in the initial stage of the New Palace, of the processional scheme. In one form or another this decorative method, showing files of persons of both sexes, goes back even beyond the early Dynasties, and it is well represented in the Middle Kingdom tombs, as at Beni-Hasan. In the L. M. I *b* Palace the direct relationship of the 'Procession Fresco' with the scenes depicted on the walls of the Theban tombs commemorating the Viziers of Queen Hatshepsut and Thothmes III cannot be doubted. There, too, as we have seen, the men of Keftiu, with the same flowing locks and the same attire—including at times the 'Libyan Sheath' of Minoan Crete—once more come into view, in this case offering tributary gifts to Pharaoh's officers, in the same manner as on the Palace walls they carry the sacred vessels of the Goddess. The earliest of these tombs—that of

¹ It is here assumed that the Miniature Frescoes—a fragment of which occurred in a pure M. M. III *b* element underlying the foundations of the new façade on the Central Court carried out according to the plan of the 'Great Rebuilding' (see *P. of M.*, ii, Pt. II, p. 803 and notes 1 and 2)—may have found their continuation among the other traditional

forms preserved in the reconstructed Palace of the close of M. M. III *b*. In vol. i of this work, published in 1911, these frescoes, the 'rococo' element in which is stressed, were referred to L. M. I. Their advanced character none can deny, but the stratigraphic evidence as to the M. M. III *b* date of those actually preserved to us is conclusive.

Senmut¹—goes back to the second decade of the Sixteenth Century B.C., while that of User-Amon,² where, as in the other, we have many copies of contemporary Minoan vessels, belongs to the beginning of Thothmes III's reign (c. 1500 B.C.).

The echo of these processional records may well have reached Knossos by the opening of the Fifteenth Century B.C., to which date on various grounds the beginning of the L. M. I b ceramic style has been here assigned. Its 'vogue' thus roughly corresponds with the reign of Thothmes III, and—as is best shown from the painted pottery found in connexion with the presumed 'South-West Sanctuary'³—practically represents the earliest class of ware stratified within the later Palace precincts.

Fragments found North-West of the Palace borders tend to show that this stately decorative system was not confined to the Entrance Corridor and Propylaea, but had extended to the whole of the *piano nobile* on that side of the building. Other important pieces found in the area of the 'Domestic Quarter' also point at least to its partial adoption on that side. In their lavish repetition, indeed, of costly offerings to the great Goddess of the Palace sanctuary these processional scenes show a kindred spirit of display to that exhibited by the 'Shield Fresco'. On the whole, however, the 'Shield Fresco'—so significant of military parade—seems to have belonged to a somewhat later stage and, indeed, had probably replaced a Processional scheme on the Grand Staircase.

Extension
of processional
scheme in
L. M. I b
Palace.

It is noteworthy that the ceramic associations of the 'shield fresco' fit on to the fabrics of the L. M. I b and L. M. II styles. The combination of the Minoan 8-shaped shield with a spiral band already appears on a remarkable polychrome goblet from Grave V at Isopata⁴ of L. M. II date, with unfixed colouring, designed *in usum mortuorum*, and paralleled in this respect by some painted clay braziers from Hagia Triada belonging to the latest palatial stratum there, which overlaps the L. M. I b Period. In various other L. M. I b connexions this form of shield was in fact common on the site of Knossos, and among wares exported overseas as far afield as Gezer in Palestine.⁵ On the other hand, the motive of Minoan shields linked with spirals enclosing rosettes, as in the case of the Fresco, is found on

Reflection
of 'Shield
Fresco'
on L. M.
II Vases.

¹ *P. of M.*, ii, Pt. II, pp. 736–8.

² *Ib.*, p. 534 seqq. and Figs. 337, 340, and pp. 736, 737.

³ See above, Pt. I, p. 355 seqq. and Fig. 301.

⁴ See *P. of M.*, iii, p. 310, Fig. 198 a, and cf. A. E., *The Tomb of the Double Axes* (*Archæologia*, vol. LXV), p. 27, Fig. 37, a and cf. Pl. IV.

⁵ *P. of M.*, iii, p. 312, Fig. 200 (from *aryballos*). Cf. R. A. S. Macalister, *The Excav. of Gezer*, vol. ii, p. 155, Fig. 318. A fragment of a similar vessel from Phylakopi (*Ib.*, Fig. 201; *Phylakopi*, Pl. XXXI, 5) shows the shield in connexion with the 'Canopied Was' motive of L. M. I b. It occurs on a

a fine 'amphora', now fully restored, from the borders of the 'North-West Sanctuary Hall' at Knossos in the finest 'Palace style'.¹

The comparatively simple spiral and rosette band that, both in the fresco and the allied ceramic types, links the shields, reappears as a prevalent dado band in the 'Domestic Quarter'. In the 'Hall of the Double Axes', as already observed, the shields themselves may well have hung from this band.

Survival
of high
gypsum
dadoes in
basement
areas.

In the well-protected basement chambers on this side the earlier system of high gypsum dadoes still survived. But both the 'Procession Fresco' and that repeating the 8-shaped shields illustrate a change of fashion very characteristic of the last Palatial phase in which the stone dadoes high or low were given up and the decorative design, consisting solely of painted stucco, reached down to the pavement.²

Signs of Religious Influences, Egyptian and Syrian, on the 'New Era': Access of Sacerdotalism at Knossos.

Egyptian
and
Syrian
religious
influ-
ences.

Hippo-
potamus
Goddess
Ta-urt
originates
Minoan
Genii.

Votaries
of 'Camp-
stool
Fresco'
in Syrian
Gaber-
dines.

The increased vogue of certain religious subjects and the growth of Sacerdotalism, which characterizes the latest Palatial phase of Knossos in a special degree, seem to have been largely due to influences, both Egyptian and Oriental, which up to a certain point no doubt were common to the whole Minoan World. The appearance of the Hippopotamus Goddess Ta-urt in her astral relation on a ceiling of Senmut's Tomb³—otherwise so illustrative of the connexions with the Keftiu regions—is something more than an accidental phenomenon. From the beginning of this epoch⁴ the beneficent Egyptian Goddess is taken over by Minoan religious Art as the Genius of vegetation and animal life. On the other hand, the 'Camp-stool Frescoes' of Knossos—associated with 'Palace Style' vases—display votaries, belonging we may suppose to some sacral College, wearing long robes of Oriental fashion that also characterize certain princely figures on gems, some of which—like one found in the passage behind the 'Room of

similar fragment from Knossos (Ashm. Mus.) whereas at Gezer the shield is associated with an asterisk. It apparently belongs to a cup, on the upper margin of which is a conventionalized rock ornament.

¹ See above (Pt. I), p. 341, Fig. 284.

² Examples can be cited of earlier date showing painted stucco decoration reaching to

the floor, such as the Hagia Triada scenes depicting the cat and pheasant and the leaping roe. But it is only now that the fashion becomes general.

³ See above, p. 438 seqq. and Fig. 362.

⁴ E.g. on the handle of the bronze *hydria* from Kurion. See above, pp. 456, 457, and Fig. 381, with marine style relief, L. M. I b.

the Throne'¹—bear Syro-Egyptian axes. In the probably contemporary Palanquin Fresco the Papa Rê himself has been recognized robed in a similar gaberline and borne aloft on his *sedia gestatoria* by priestly acolytes in similar vestments.² Of the prominence at this time of the Cult of the Double Axe at Knossos the evidence of its repetition on the great 'Palace Style' jars has now received striking corroboration from the recent discovery in a not distant cave sanctuary of a whole hoard of gold votive axes³ in form and decoration resembling those on the vases.

Increase
promin-
ence of
Double
Axe Cult.

Successive Phases of the Last Palatial Age accompanied by General Continuity of Cultures.

Strictly speaking the latest Palatial phase may be said to fall into two main divisions. Its mature stage is signalized by the radical implantation of the 'Room of the Throne' and its connected block and—as the 'Argonaut frieze' described below shows—by some parallel redecoration, at least in the 'Domestic Quarter'. Its close is marked by the beginning of a further extensive scheme of renovation, cut short by the final catastrophe, in the basement rooms of the East Quarter, perhaps in itself a continuation of the changes that had already preceded it. The 'Intermediate Renovation'—a term that here includes the construction of the 'Throne System'—may well be regarded indeed as marking the full establishment of the new Régime—and as probably corresponding ceramically with the perfected evolution of the L. M. II 'Palace Style'. The detailed evidence that we possess of the gradual transformation of the L. M. I *b* style, which had preceded this in the new Palace, itself seems to exclude the idea of a sudden convulsion within its walls. We have indeed the proofs of a gradual and continuous development throughout this latest chapter in the Palace history. From the beginning, moreover, we note the same new spirit that dominates the whole, and the presence of certain elements—particularly visible in the documents of the new script—that are best interpreted as indicating the advent and continued domination of a new dynasty.

Latest
Palatial
Age: two
divisions.

'Inter-
mediate
renova-
tion'—
Throne
Room
system.

Gradual
trans-
formation
of L. M.
I *b* style
on vases.

Indica-
tions of
New
Dynasty.

As illustrating the general unity of this latest Palatial culture, the pottery of this epoch—for which the evidence is for the first time adequately put together in this Volume—also supplies a convincing record of the gradual process of transition by which one ceramic phase grew out of another. It will be seen that the earliest examples of the L. M. II

General
unity of
latest
Palatial
culture.

¹ See above, p. 414, Fig. 343 *b*.

² *P. of M.*, iv, Pt. I above, p. 346, Fig.

³ *P. of M.*, ii, Pt. II, p. 770 sqq. and Fig. 503. 290.

'Palace Style' in vase-painting were simply evolved out of those of the fine L. M. I *b* class, which was current at the time when the new régime established itself. In the transitional stage, indeed, it is often difficult to decide whether individual specimens¹ belong to the latter class or should be described as L. M. I *b* or L. M. II *a*.

Illus-
trated by
'S.W.
Corner
Deposit'.

The best collective view of the whole ceramic material as stratified is supplied by the large deposit of sherds found round about the original South-West Corner of the Palace, and which seem to stand in relation to a sanctuary formerly existing at that spot. Of these the most important specimen was the 'amphora' in the pure 'marine' style of L. M. I *b*, Fig. 215 above,² showing an octopus with sea-tang and rocks with coralline growth. But from the selection of sherds shown in Fig. 301³ it will be seen that, in addition to numerous other specimens in the same L. M. I *b* style, we have a continuous series of sherds and entire goblets—presumably of offertory use—covering the whole duration of the Knossian L. M. II style.

Indications of Advent of New Dynasty: Its Aggressive Character.

Centra-
lizing and
aggres-
sive
character
of New
Dynasty.

As already observed, the clearest evidence of a change in administration—to be reasonably interpreted as marking the accession of a new family of Priest-kings—is supplied by the introduction of the linear Script B. This Script, as we have seen, represents what seems to have been practically the same language, containing indeed personal names identical with examples that occur on tablets of Class A, and parallel with it as regards its ultimate sources. This new Script, moreover, can be shown to go back to the initial stage of the Palace as now remodelled, within which, indeed, no specimens of Class A came to light.

The earliest specimens of tablets found in the Palace with inscriptions of this later Class present in fact the hard-baked texture that is usual with those of Class A as found in M. M. III–L. M. I *a* deposits—very different from the sun-baked appearance of the clay⁴ in the great bulk of the tablets showing the B Script. It is noteworthy, moreover, that one of the hardest baked specimens contains figures of Vapheio cups⁵ of

¹ Such, for instance, as the vases presenting the decorative designs seen on p. 282, Fig. 216, p. 283, Figs. 217, 218, p. 321, Fig. 262.

² See p. 280.

³ See p. 361 seqq.

⁴ In this comparison no account is naturally taken of the tablets which had suffered from the burning of the structure that had contained them.

⁵ See above, p. 729, Fig. 711.

M. M. III—L. M. I *a* tradition. The new Script itself bears a more advanced character, and, as brought to its full development by the Palace scribes, implies considerable mastery over the Art of Writing. At the same time the multiplicity of officials, of which the documents give evidence, the signatures and counter-signatures—every symptom in short here revealed to us—points to a highly centralized and autocratic Government.

For the first time a whole series of clay documents appears referring to armament of the most varied kind—chariots and horses, cuirasses for the Minoan 'knights', swords, javelins, and arrows, the numerical indications attached to which are by no means small. One tablet alone refers to 90 chariot bodies, a consignment of fifty swords is recorded on another, while a single document relating to arrows enumerates 8,640. There seems to have been a regular 'Armoury', and the great 'Shield Fresco' of the 'Domestic Quarter' is itself a monumental instance of military parade.

Contemporary rulers, either on the borders of the great Mesarà plain of Southern Crete or of the hill sites that overlooked the Argolid plain on the opposite Aegean Coast, were hardly so simple as to imagine that the chariots of Knossos were built with a view to driving through its rough, surrounding lowlands.

That the Priest-kings of Knossos in the early part of this epoch were in fact wielding destructive powers in their own Island may be gathered from the significant break that now reveals itself in the history of other Minoan sites that have been recently explored in Central and Eastern Crete. In L. M. I *b* the Palace of Phaestos, the great rival of Knossos on the Southern Coastland, comes to an abrupt end, and the Little Palace of Hagia Triada nearby bears evidence of a contemporary destruction. On the Northern shores the brilliant career of the Western neighbour of Knossos, Tyliossos, is as suddenly cut short. In the Eastern direction the Minoan harbour town on the site of Nirou Khani, the great Palace of Mallia beyond, the flourishing country town of Gournià, with other thriving urban sites on that side, all break off. In nearly all these cases, moreover, the destruction was not of the more temporary kind resulting from earthquake shocks, but one involving actual cessation, at least through an appreciable period of years.

Signs of
destruction
on
other
sites.

Nor was it the other Insular communities alone to whom these military preparations were a menace. The clay sealing with the horse superposed on the ship—an eloquent reference to sea-transport—is itself a highly suggestive symptom. The chariots themselves were more easily conveyed over sea than the horses that drew them. And there is one truly astonishing

piece of evidence that speaks of something more than horses or chariots having formed part of the cargo of the transport vessels in the service of the latter day lords of Minoan Knossos.



FIG. 869. 'THE CAPTAIN OF THE BLACKS.' (CP, COLOURED PLATE XIII, *P. OF M.*, II, PT. II, OPP. P. 756.)

In the remarkable fresco fragments described above under the title of the 'Captain of the Blacks'—here reproduced in Fig. 869—which, from the circumstances of their finding must be referred to the latest Palatial Age, we see a Minoan officer armed with two spears, and wearing a black

goat-skin head-piece, leading what we can only suppose to be a troop of negro mercenaries similarly uniformed and armed, save that each had only one spear.¹ It seems highly probable that these docile and easily drilled negro bands were actually employed in Minoan military enterprises on the Mainland side in much the same way as the swarthy troops of Ibrahim Pasha. Had black mercenaries, under Knossian leadership, overrun the Morea some thirty-three centuries earlier?

There are many reasons for inferring that there was military aggression at this time on the part of the Priest-kings in that direction. The intrusion of the Knossian 'Palace Style' at Argos is a highly significant fact, and the similar evidence at Mycenae itself extends to the adoption of the late 'Palace Style' of wall painting. On this side, moreover, we have signs of a widespread catastrophe about the end of L. M. I b.² This, in fact, is the date when—alike at Mycenae itself and on the Western seaboard of the Morea—the great beehive tombs seem to have undergone methodical plunder and their continuous use comes to an end. The implanting of the Knossian Palace Script in the chief civic centres on either side of the Gulf itself supplies strong ground for believing that the Priest-kings of Knossos had at this time acquired a partial dominion in Mainland Greece.

Destruction extends to contemporary mainland sites.

¹ See *P. of M.*, ii, Pt. II, p. 755 seqq., and Coloured Plate XIII (opp. p. 756). The possibility that these negro mercenaries were transported from the opposite Tripolitan coast is there suggested. Evidence of close relations with people of negroid type, some seen in a suppliant attitude, is already supplied by the 'Town Mosaic' (M. M. III b). (See *Ib.* i, p. 308 seqq. and Figs. 228, 230.)

² In *J. H. S.*, xlv (1926), p. 111, Mr. Wace (the Late 'Date of the Treasury of Atreus') refers to the discovery by Tsountas of glass paste ornament on the floor of the Beehive Tomb at Mycenae described as the 'Tomb of the Genii' from the representations on them (see my *Myc. Tree and Pillar Worship*, &c., p. 117, Figs. 13, 14: Fig. 14 referred to by Tsountas, *Πρατικά*, 1896, p. 38). The glass paste is stated there by Mr. Wace to date the Tholos to 'L. H. III' (L. M. III). But the style of the 'Minoan Genii' here represented (see above, p. 454, Fig. 379, a) is of good L. M. I b

work. It is in fact certain that, at Mycenae at any rate, the use of impressed glass plaques and beads goes back at least to the later phase of L. M. I. Good evidence of this, indeed, has been supplied by Mr. Wace himself in his publication *The Chamber Tombs of Mycenae* (*Archaeologia*, 1932). In Tomb 516 at Kakani a series of glass beads were found, including tabular and 'bi-tabular' examples of blue glass (like the impressed glass plates with 'Genii'). An engraved glass bead also occurred in this grave of an 'amygdaloid' type that has been shown above to have early associations. The pottery found with these was in the best L. M. I b style (*op. cit.*, Pl. XXXIII). The glass beads of the 'Tomb of the Genii' (relics left by the plunderers of its floor cists) must be rather regarded as establishing the conclusion that here, as in the case of the 'Tomb of Aegisthos'—hard by that of 'Klytemnestra'—the latest elements of its original occupation were L. M. I b.

'Minos II'.

May we not here, indeed, recognize the 'Second Minos' of later story—the tyrant of Athens who, according to the grim traditions, fed the Minotaur with its tribute children, but who also rose to fame as the first organizer of the 'Empire of the Sea'? Had Athens, too, like contemporary Canaanite cities under Pharaoh's sway, held a negro garrison?

Inception of Extensive Scheme of Renovation towards Close of Last Palatial Age and Construction of 'Throne Room' System.

Great scheme of renovation undertaken in Palace.

An interesting and distinctive feature about this 'Latest Palatial Age', as here defined, and fairly accurately corresponding with the Fifteenth Century B.C., is the evidence that is forthcoming of the actual inception, towards the close of the period, of what must to have been a grandiose system of restoration, the occasion of which does not seem to have been, as in other cases, due to some seismic overthrow either partial or general. The origin of the restored structures that now rise to view may be rather set down to the self-assertion of what seems to have been a new and despotic dynasty, by this time firmly established on the throne of Knossos.

Intrusion of wholly new block with 'Room of the Throne'.

In the area North-West of the Central Court, where the 'Room of the Throne' described below and adjoining system was now constructed, this was not, as had been usual in other restorations, a remodelling—in however extensive a scale—of existing elements. Here whatever arrangement of the building may have previously existed was swept away so thoroughly as hardly to leave a trace. A wholly new block was set up on a *tabula rasa*.

Elsewhere, on the other hand, in the Palace area we see a parallel process of wholesale renovation of the surface decoration.

Incipient redecoration of East Quarter.

That some later stage of this, indeed, was still in course of execution—perhaps after a considerable interval—shortly before the final overthrow, is shown by the state in which the floors of a whole section of the Domestic Quarter were found. The 'Lobby of the Wooden Posts' opening on the continuation, North, of the lowermost 'East-West Corridor' was in places a foot deep in plasterers' material. A good deal of this extended into the Western end of the 'Hall of the Double Axes', but the climax was reached in the 'Queen's Megaron' and adjoining Bath-room.¹ The little Bath-room itself was half full of lime, and a large L. M. I *a* pithos found just outside was chock-full of it. The plaster on the North wall of this Megaron, as on that to the East, and of the adjoining Corridor had been

¹ See especially, A. E., *Report, Knossos, 1902* (*B. S. A.*, viii), p. 48.

picked away and lay in heaps. More than this, a small chamber South of the light-well of the same Hall had been actually turned into a kiln.

As, however, in the 'Queen's Megaron', the Bath-room, in the Corridor running West from it, and again, in the 'Hall of the Double Axes', there were remains of painted plaster, with the usual spiraliform dado patterns found still adhering to the walls, it may be gathered that the actual work of redecoration had not begun in this area. A section of it had been temporarily given over to the plasterers and freely used by them as their workshop and store-house, but the existing wall-paintings there had not been removed, and the gypsum dadoes—still rife in this quarter—also remained in position. But in the Eastern section of the lowermost East-West Corridor, bordering the 'Hall of the Double Axes' on the North, in the adjoining 'Lobby of the Wooden Posts' (also used as a plasterers' store) in the East Corridor and throughout the connected systems, it would seem that the walls had already been stripped of their decorative coatings.

It was quite natural, and in conformity with general usage in such cases at the present day, that the ground floor should have been used as a base for the artisans engaged in redecorating the rooms and galleries of the upper floors. That this work had been already carried out in a section of the first floor area is demonstrated by actual remains of the decoration in the new style found in connexion with the 'Upper Hall of the Double Axes'—in that case attaching to the wall between it and the adjoining 'Middle East-West Corridor'. Here the work was clearly contemporary with the building of the 'Room of the Throne'.

Redeco-
ration
com-
pleted on
upper
floors of
'Domestic
Quarter'.

A series of painted plaster fragments came to light that had originally fallen on the floor of this Upper Corridor, sinking with it below its original level, and we may assume that most of them belonged to the passage-way itself. Thanks to the fruitful study of a group of these remains by Monsieur Gilliéron, fils, it is possible in Fig. 870 to give a restored view—reduced to one-quarter—of a section of the subject, which is clearly an Argonaut, the typical three tentacles of which here appear under a highly decorative guise. They present central rows of oval designs, white, blue, and red, with white 'eyes', representing the suckers, arranged like chains of beads. The cusped upper edges of the tentacles—white against the dark Venetian red background—were doubtless suggested by the ridged flutings of the Argonaut shell. As shown by the key section, Suppl. Pl. LXIV, black, orange, brown, blue, white, and Venetian red are comprised in the colour scheme. The blue was of an indigo tint and no longer the brilliant cobalt-like *kyanos* of the best L. M. I *a* tradition.

The
'Argo-
naut
Frieze'.

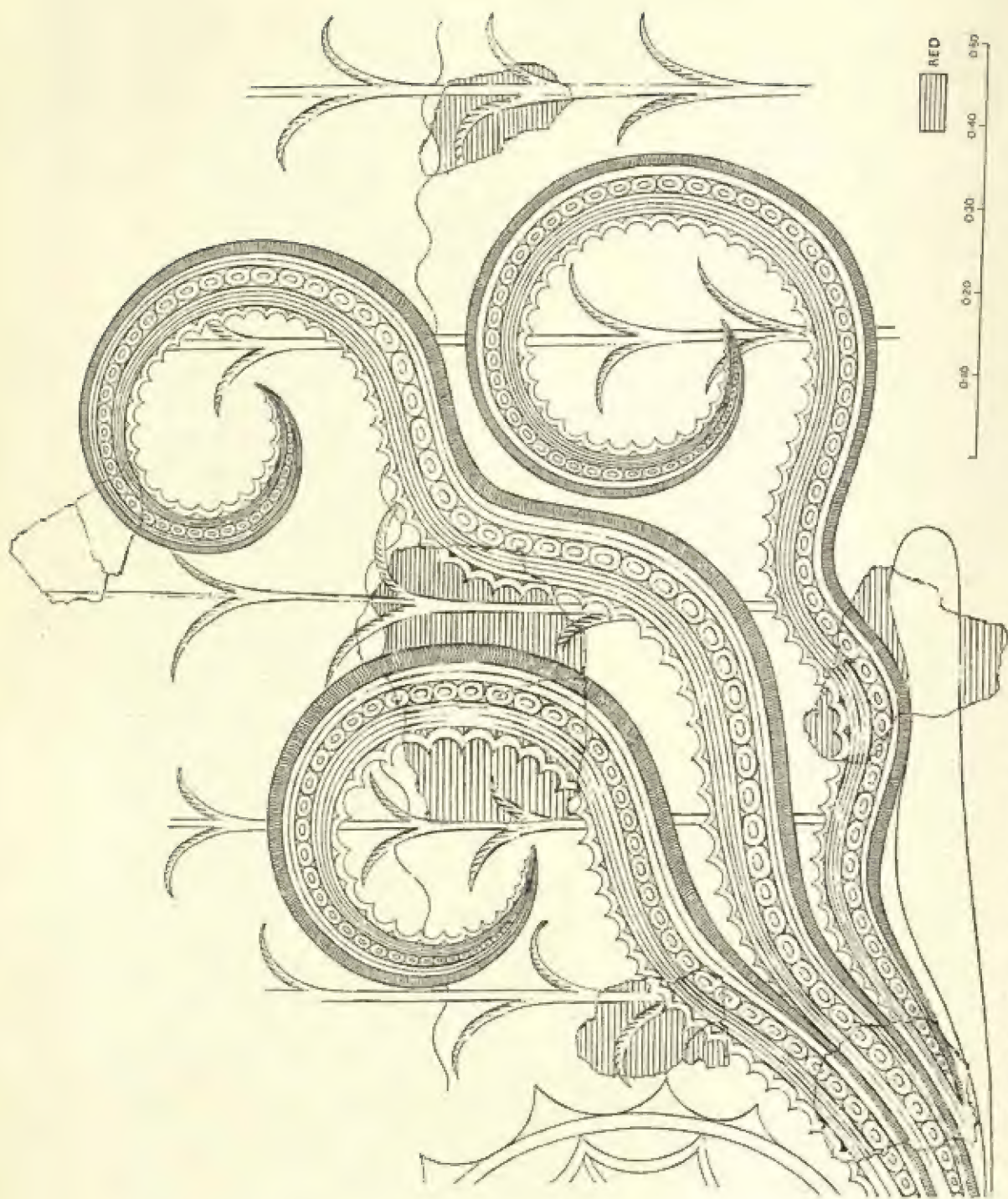


FIG. 870. SECTION OF ARGONAUT FRIEZE (L.M. II): RESTORED BY E. GILLÉRON, FILS. REDUCED TO $\frac{1}{3}$.

It is at first sight surprising to find this sea creature backed by a row of upright plants with reed-like stems showing striped foliage like that of the similar plants which we shall presently see between the couchant Conventional reeds of Argonaut Frieze

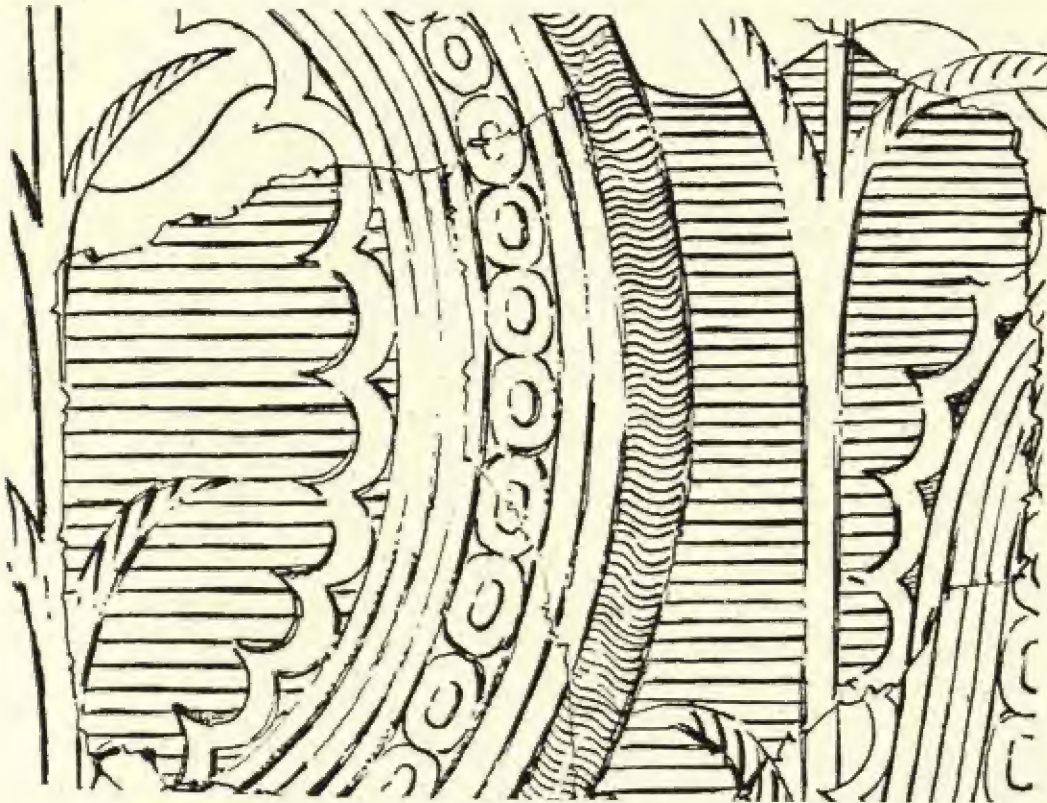


FIG. 871. SECTION OF 'ARGONAUT FRIEZE', WITH REEDS IN BACKGROUND (7).

Griffins of the 'Room of the Throne'.¹ In that case—as would probably these if completed—they bear flowering papyrus-like tufts, a convention already well represented in the plant decoration of the 'House of the Frescoes' of M. M. III—L. M. I *a* date. The seeming contradiction presented here by the appearance of terrestrial plants in the background of what otherwise appears to have been a marine scene would hardly itself strike a Cretan, accustomed to the reed thickets that border the sandy coves of the Island, often a few feet distant from the sea margin.

similar
to those
of 'Griffin
Frescoes'.

Allowing for the flowering tufts of the reeds, the height of the painted band of the frieze would have been about 1.15 metre, which closely

¹ See below, p. 911, Fig. 884, and Coloured Plate XXXII.

corresponds with that in the 'Room of the Throne', presenting seated Griffins. There, too, we see 'papyrus reeds', with identical foliage, rising behind against a similar background. The conformity, moreover, is carried a step farther by the parallel convention—also characteristic of the 'Procession Fresco'—according to which the background of the designs consists of broad wavy bands, alternately white and Venetian red. Curves of the upper white band appear in Fig. 870. Both in style and scale the two groups of friezes were clearly part of the same decorative scheme of restoration.

It seems probable, in view of this analogy, that the frieze itself was superposed on a dado showing a coloured imitation of the veins of variegated stonework.

In the region East of this, above the old Northern continuation of the 'Lower East-West Corridor', upper floor elements had also been preserved. Here were the remains of the 'Taureador Frescoes' which originally seem to have belonged to some kind of Loggia above the so-called 'School Room' and overlooking the little 'Court of the Stone Spout'.¹

These 'Cow-boy' frescoes—which should rather be referred to circus scenes than to the open country—themselves, as already shown, go back to the very finest phase of Minoan wall-painting.² They contain, however, some specimens which may well be set down to later restoration, and it is clear that this class of design was never more popular than in the latest epoch of the Palace. Among works of this kind belonging to the final phase of renovation is a patch of painted plaster that was found clinging to the lower part of the North wall in the entrance section of the 'Upper Hall of the Double Axes'.³ This, together with the walling to which it belonged, had sunk nearly half a metre below its original level, owing to the carbonization of the wooden beams below. It has, however, been now raised to the level of the restored pavement from which, as in the case of the 'Procession Fresco', the painted design rose without any intervening dado. The surface of this stucco fragment had suffered apparently from a period of long exposure, and all that can be made out is a bull's foot resting on the ground with shoots of vegetation on either side. The subject itself may well have resembled that indicated by a bull's hind foot in a similar position on the remains of the fresco band above the

Continued
vogue of
'Cow-boy'
Frescoes.

¹ See *P. of M.*, iii, opp. p. 270, Fig. 183, Plan of region including East Corridor, Court of Stone Spout, and East Portico.

² See *P. of M.*, iii, p. 211 seqq.

³ *Ib.*, p. 294.

bench along the South wall of the Ante-room of the 'Room of the Throne', but in that case, too, only the lower fringe was preserved.

In the 'Ante-room', however (more fully described below), the foot of

Similar fresco in Ante-room of 'Room of the Throne'.

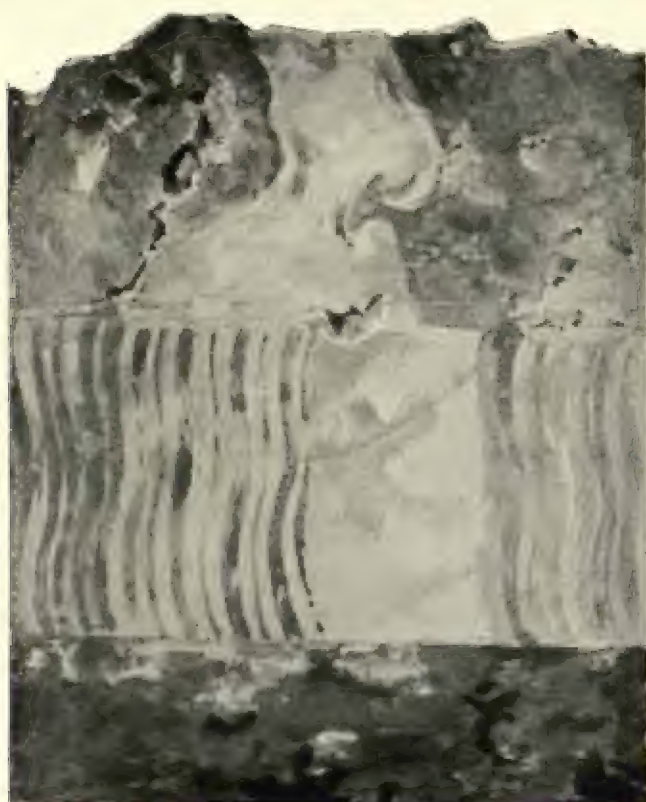


FIG. 872. SECTION OF FRESCO BAND FROM ANTE-ROOM OF THRONE ROOM SHOWING BULL'S HIND FOOT RESTING ON FRIEZE OF IMITATION MARBLE BLOCKS.

the bull rests on a low dado band depicting the waved striations of stonework (Fig. 872). This pattern, seen as here with intervening black patches, has an interest as supplying a favourite ceramic motive on 'amphoras' and other vessels,¹ an example of which occurs on one of the latest relics found in the Palace—the clay bath-tub from the Bathroom of the Queen's Megaron.²

These waved striations, imitating the grain of stonework, occur in a more continuous shape beneath the couchant Griffins in the 'Room of the Throne' itself. Under a variant form, and also belonging to the latest Palatial phase, we find the same ar-

Contemporary Bullfresco of W. Porch.

range of a low dado copied from the grain of various stones in the left wall of the West Porch, in that case, too, serving as the base of a scene of the bull sports.³ The surface of the painted stucco was too much decayed and flaky to be either preserved on the wall or successfully removed,

¹ See, too, A. E., *Tomb of the Double Axes*, p. 46, Figs. 60, 61, and *P. of M.*, iv, Pt. I above, p. 309, Fig. 244 a, b. There may in these cases have also been some suggestion of the 'fluting' decoration, *ib.*, p. 275, Figs. 208,

209 (L. M. I b).

² *P. of M.*, iii, p. 385, Fig. 256.

³ See *P. of M.*, ii, Pt. II, p. 674 seqq., and Figs. 428, 429.

894 BULL-CATCHING SCENE ABOVE 'MARBLED' DADO

but an idea of the original effect is given in Fig. 873, from a sketch by Mr. Piet de Jong.¹ Here the graining appears on painted imitations of square blocks, arranged, in this case, from left to right in threes, with

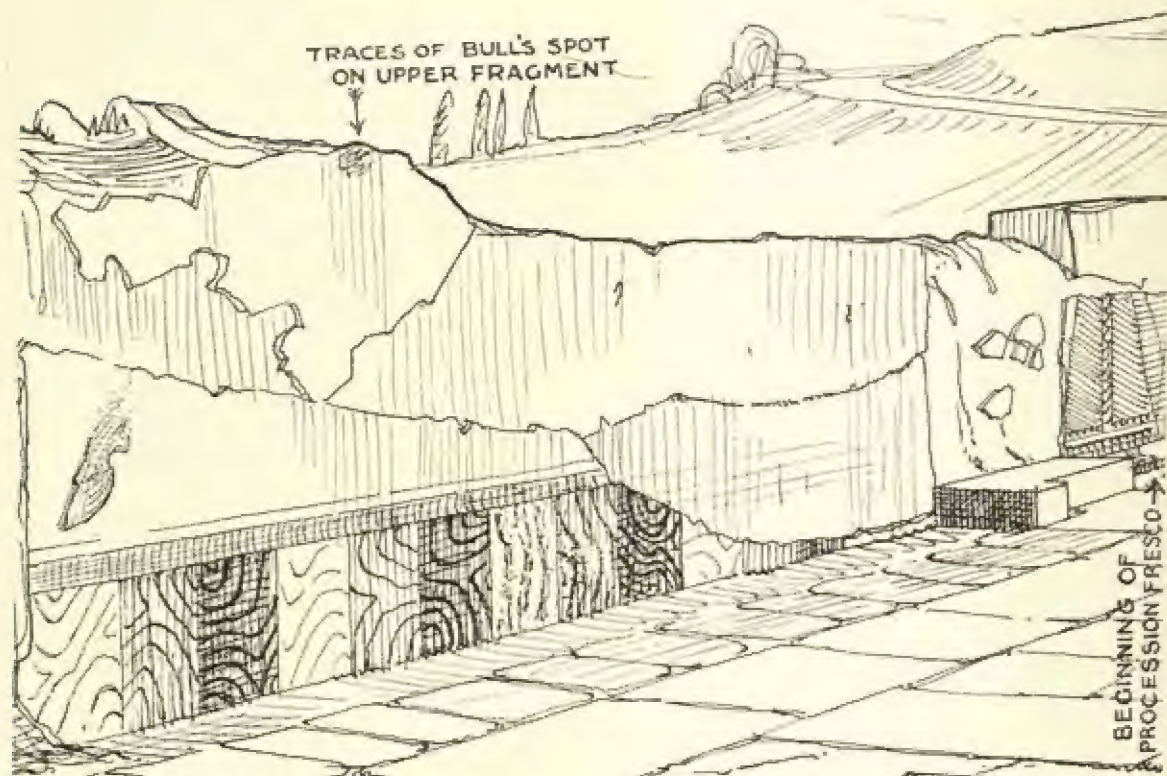


FIG. 873. REMAINS OF LEFT WALL OF 'WEST PORCH' SHOWING PAINTED STUCCO FACING WITH BULL'S FORE-FOOT RAISED ABOVE DADO OF IMITATION MARBLE BLOCKS AND BROWN SPOT OF THE ANIMAL VISIBLE ON UPPER PATCH OF PLASTER.

a graduated succession of colours from pale yellow with darker veins to rose and blue. Above this was a dark narrow band, and, in the creamy white field above, the fore-foot of a galloping bull, while on a separate piece, higher up, a brown spot of the bull's side was visible.

Parts of two underlying plaster layers were distinguishable with some traces of black spots, and sufficient indications that bull-grappling scenes had been here executed at three different epochs, the first no doubt contemporary with the construction of the Porch in its later shape, and the

¹ Owing partly to the perspective view the square to oblong is not here sufficiently brought out.

last presumably belonging to the latest redecoration towards the close of L. M. II.

It will be seen at once that the grained squares here present a close parallel to those that at Mycenae decorate the floor of the 'Megaron', surrounding the hearth, and are also found in its *prodomos*, and, better still, in the North section of the adjoining Court.¹ In the latter case, though they show a greater variety and are arranged like a knight's move at chess,² there are some obvious correspondences in detail. The squares in the hearth-room belong to the third of three plaster layers, and these, as in the Court, date from the latest stage of the building. In a more decorative form and with squares depicting octopods or pairs of dolphins this painted stucco type of pavement recurs in the later Palace at Tiryns,³ here again in the Megara containing the hearths.

Painted
stucco
copies of
squares of
varie-
gated
marbles.

The important point to observe about these 'marbled squares' is that, whether seen on dadoes or floors, whether found in Crete or the 'Mainland', they reflect the old Cretan taste for rockwork decoration. Already early in the Middle Minoan Age this taste influenced the wall painter who executed the 'Saffron Gatherer' fresco, and in the conventional row of rocks in painted relief beneath the charging bull of the North Portico we recognize its architectonic application in a later phase of the same Age. Part of the lower border of a large panel consisting of purple gypsum,⁴ with its upper edge cut into rock-work shape, actually occurred in the 'Domestic Quarter'. The panels of the more or less contemporary fresco depicting a miniature Pillar Shrine⁵ are filled with black, white-spotted slabs that may well represent the imported liparite, of which a large block was quite recently found in the seaport of Knossos.⁶ Fragments of what

¹ For the remains at Mycenae, see Tsountas, *Πρακτικά*, 188 p. 59 seqq., G. Rodenwaldt, *Jahrb. d. d. Arch. Inst.*, 1919 (from notes taken in 1914), and the fuller researches of Miss Lamb, *B. S. A.*, xxv (1921-23). Dr. Rodenwaldt stresses the influence of Egyptian ceiling-patterns which, in cases, may be considered as a contributory element. But the main source is, clearly, the graining of cut stones. For the zigzag and concentric arch patterns (*Jahrb.*, *loc. cit.*, pp. 100, 101, Figs. 7, 8) the prototypes must be sought in the veining of alabaster and in the pebbles of conglomerate—the latter specially appropriate to Mycenae.

The earliest stucco pavement of the Megaron there probably belongs to the same date as the first layer round the hearth which shows a plain undulating pattern (*B. S. A.*, xxv, Pl. 41, I B) affiliated to a M. M. III b type.

² W. Lamb, *B. S. A.*, xxv, *loc. cit.*

³ Tiryns in Pls. XIX, XX, and p. 220 seqq. (R. Hackl, *Die Fussböden der beiden Megara*).

⁴ *P. of M.*, iii, pp. 365, 366, Fig. 243.

⁵ *P. of M.*, i, p. 446, Fig. 321.

⁶ The block was found below a modern building within Candia itself. This information is due to Dr. Sp. Marinatos.

Earlier
'Marbled
Fresco':
M. M. III.

seem to have been the actual dado slabs in mottled, highly polished marble, belonging to the earlier Propylaeum, were discovered in its stone Repository below. Most illuminating of all, and belonging probably to the same early

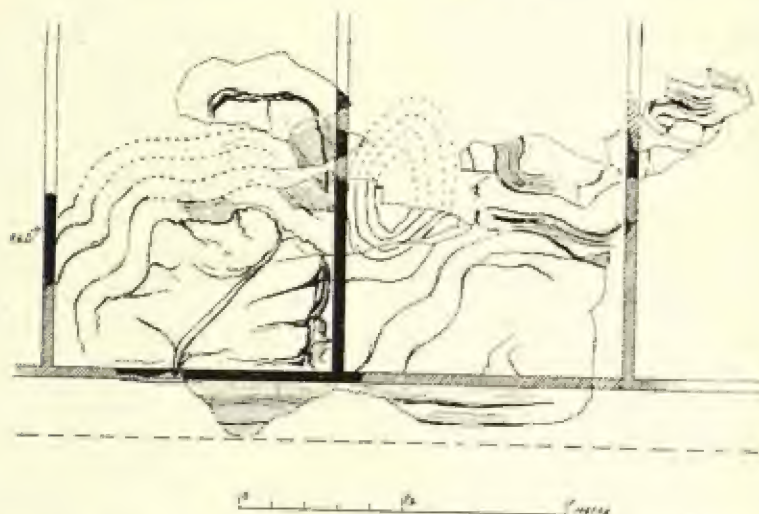


FIG. 874. PAINTED STUCCO DADO FROM EAST PALACE BORDER SHOWING NATURALISTIC IMITATION OF MARBLE PANELS.

M. M. III Period (*a*), is the actual section of the painted stucco dado known as the 'Marbled Fresco'¹—found in close relation to the 'Labyrinth Fresco'—variegated in the most natural manner with bands and veins of brown and orange hues (Fig. 874). The finely drawn black frames that here define the imitation slabs recall those of the analogous pavement patterns of Mycenae and Tiryns which, together with the late dado of the Knossian West Porch, must be regarded as remote descendants of similar works of Art.

Late
Mainland
copies.

The 'Sculptor's Workshop'.

'Sculptor's
workshop'
with un-
finished
vases of
same
L. M. II
epoch.

In a small room adjoining the 'Loggia of the Cow-boy frescoes', the walls of which could hardly at any time have boasted much decoration, part of the floor was still preserved presenting every evidence of its having served as the workshop of a lapidary whose activity was cut suddenly short by the final catastrophe of the building.

Here, on the upper level, only very slightly sunken and with its upper part some 25 centimetres beneath the surface of the ground, was found a

¹ See *P. of M.*, i, p. 356, Fig. 255, which Figure is here reproduced.

large amphora of a kind of veined native alabaster.¹ It was 69 centimetres (about 27 inches) in height, and 2.5 metres, or 6 feet $8\frac{1}{4}$ inches, in circumference (Fig. 875 *a, b*). Its walls thickened from 6 cm. at the neck to 17 cm. at the sides, and some idea of its massiveness and weight may be gathered from the fact that eleven men with ropes and poles carried it down with difficulty to the house below, which was then our head-quarters. Two of the handles and parts of the rim and shoulders had somewhat suffered from their nearness to the surface, but as a whole the vessel was well preserved.

Great
gypsum
amphora.

The flat upper rim was decorated with a band of running spirals, while round its shoulders ran a chain of coils rising up to a point and resembling a row of large *trochus* shells. This was interrupted by three handles, decorated on their outer sides with the same spiraliform band as the rim.

But the most individual feature of the handles was the cutting out of their sides into arched hollows, joined in each case by means of a perforation devised to rivet in some inlaying material. The analogy of the more or less contemporary alabaster frieze from the vestibule of the 'Mens' Hall' at Tiryns, where the inlaying material was *kyanos* or smalt, as well as of the Orchomenos ceiling and the columns of the 'Atreus' tomb at Mycenae, might, perhaps, suggest glass paste or perhaps some bright coloured stone like jasper as the material thus employed. But rivet-holes to connect two plates certainly point to metal-work, and it is reasonable to suppose in the case of an object of such splendour that the intention had been to insert plaques of gold. That this final adornment had never been added may be inferred both from the apparently incompleting moulding of the lower part of the 'amphora' and from the absence of any trace of oxidation from the bronze, that would probably have been used for the rivets, in any of the perforations. To those familiar with the decorative spirit of the Minoan craftsmen it will be a highly probable conclusion that in the fully completed stage of the vessel—the material of which was uniform in tone—it would also have been treated with coloured washes in such a way as to bring out its sculptured ornaments into brilliant relief. With its gold plates fixed and these polychrome touches added it would, indeed, have been a royal possession.

That the great stone 'amphora' was in fact still in the hands of its sculptor is borne out by the analogy of a smaller, quite unfinished, vessel of the same kind found beside it on the floor of the 'Workshop' (Fig. 876).

Smaller
unfin-
ished
amphora.

For the 'Sculptor's Workshop' and its stone 'amphoras', see, too, *P. of M.*, iii, p. 268, and A. E., *Report, Knossos*, 1901, pp. 90-3.

898 ALABASTER 'AMPHORA' OF 'SCULPTOR'S WORKSHOP'

It is interesting to recall that immediately under this 'Sculptor's Workshop' lay the little store-room containing blocks of Spartan basalt



FIG. 875 a. ALABASTER 'AMPHORA' FROM 'SCULPTOR'S WORKSHOP'.

(*lapis Lacedaemonius*),¹ the beautiful dark green stone with its paler green feldspar crystals that at Knossos, as in Mainland Greece, was so much in

¹ See *P. of M.*, iii, pp. 269, 270.

vogue for lapidary work—including some of the finest intaglios. Several pieces there showed signs of having been worked, some being incised or



FIG. 875 A. ALABASTER 'AMPHORA' FROM 'SCULPTOR'S WORKSHOP': UPPER VIEW.

sawn across, and, since the adjoining space to the South gave every facility for a ladder to the upper room, we may fairly regard it as the annexe of the 'Workshop' above.

We have here a good instance of a fabric of artistic products within the Palace precincts, such as has been already traced in the case of the

exquisite egg-shell wares of ceramic polychromy and the varied types of objects executed in the native *faïence*. Near the great 'amphora' there stood on the same floor the much smaller example (Fig. 876), of the same general shape, but without decorative details and with its contours simply roughed out. It was only 25 centimetres (10 inches) high, and its material was a kind of limestone.

The unfinished state of the stone 'amphoras' on the workshop floor fits in with the appearance of the neighbouring basement floors, cluttered with heaps of lime and suggestive of a hasty departure of plasterers engaged in their work. In this region we find on every hand the signs of a sudden catastrophe. We shall meet with similar phenomena in the case of the fine *alabastra* on the floor of the 'Room of the Throne'. There the vases remained unfilled, in this case they were never completed.



FIG. 876. SMALLER 'AMPHORA' FROM 'SCULPTOR'S WORKSHOP' AS ROUGHED OUT.

§ 116 B. LAST PALATIAL AGE. 'THE ROOM OF THE THRONE' AND
CONNECTED BLOCK: THE CLOSING SCENE.

Abrupt intrusion of Throne Room system—evidences of early L. M. II date; Traces of bull-sport frescoes in Ante-room opening into 'Room of Throne'; Double doors to it, later removed; Excavation of 'Room of Throne'—Wall-paintings, Gypsum Throne and benches, balustrade and Lustral Basin; Indications of existence of clerestory over basin; Relics precipitated from loggia above; Marbled band and Griffin Frescoes; Features of Griffins; Conventional reads of background as on 'Argonaut Frieze'; Hatched shading of Griffin's body—early instance of Chiaroscuro; Wingless Griffin—an unique appearance; The Gypsum Throne—traces of coloured designs; 'Gothic' crockets; Counter-arch and evidences of woodwork original; Carbonized remains of wooden Throne in Ante-room; Representations of incurved altar-bases beside Throne; Inner Sanctuary and altar ledge; The 'Throne Room' Suite; Winding staircase to upper rooms; Loggia above Room of Throne; 'Lantern' above Lustral Basin restored; Upper Room re-used for Gallery of fresco copies; Service quarters in basement Section—Woman's seat at entrance; Stone drum with sunken quadrants; Probable place of wooden back-stairs; Kitchen with woman's seat, table, and side-board; Precious relics precipitated in and about 'Lustral Basin'—presumably derived from 'Loggia'; Crystal plaques of gaming boards and caskets—plaque with miniature of charging bull; 'Rhylon' relief with 'Ambushed octopus'; Shell cameo of dagger and belt; Malachite Tridacna shell; All these relics M. M. IIIb date; Throne of State to be sought in Domestic Quarter; Ritual aspects of Room of Throne—a Consistory Chamber; Ante-room a scene of initial rites; The purple gypsum font—holy-water sprinklers; 'Lustral Basin' for anointing and clay oil flasks; Flat alabastra in course of filling—ladles for extracting oil; Fallen casket with faience disks; Alphabetiform signs on disks; Sudden interruption of preparatory filling; Symptoms of fresh Earthquake shock; Evidences of conflagration during gale from South-West; No sudden break in the Culture itself; Cumulative effect of seismic menace—Site deserted by Palace Lords; Probable transference of Seat of Government to Mainland side—Knossian influence there in Art, and diffusion of later Palace Script.

FOR the ceremonial suite and its dependencies to which we are now drawn there is no parallel within the Palace area. The structures that here rose in the North-West Palace Section during the last period of the building

Abrupt
Intrusion
of
'Throne
Room'
system.

represent a revolutionary intrusion, effacing all previous remains. It was not here a question of engrafting on to an existing system or of raising a new structure over its remains. What we here encounter is a *tabula rasa*, with a wholesale invasion of new elements. The earlier basement system on the South border of this new block was abruptly cut off, including the Magazine that contained M. M. III cists, forming a supplement to those of the 'Temple Repositories'. This had run North, under what was later the 'Stepped Porch'.¹

It was in vain that a series of tests were made, under my superintendence, beneath the floors of the intrusive block. The whole sub-soil proved to belong to the same sub-Neolithic stratum that immediately underlies the greater part of the Central Court as first laid out, after the whole of the upper deposits had been cleared away for its formation.

Evidence
of early
L. M. II
date.

It was only in the course of the supplementary Excavations of 1913 that some data bearing on the chronological place of the new structure were at last extracted. Underlying the threshold of the first doorway left of the line of entrances to the Ante-room of the 'Room of the Throne' from the pavement level of the Central Court (see Plan, Fig. 877) was found a painted sherd illustrating the best period of the 'Palace Style'. Again, under the threshold of the entrance immediately North of this, there occurred some L. M. I and L. M. II fragments, in the latter case not so distinctive. The general conclusion resulting from these finds is that the structures with which we are dealing date from the early part of L. M. II, when the 'Palace Style' first reached maturity. This, it will be seen, corresponds with the suggestion already made, that the erection of this block of buildings specially designed to meet the needs of the ceremonial functions of the Priest-kings may be taken as a historic landmark of the full establishment of the authority of the New Dynasty.

The North-East Corner of the Ante-room, for the construction of which the sherds thus brought to light afford a chronological clue, had been already laid bare twenty years earlier by local hands,² but, in view of the fact that no vases or other relics of value were hit on, the work was broken off. This, indeed, may be thought to have been a happy accident, since at that

¹ Exceptionally, however, a Magazine running West of this seems to have been at first worked into the later systems. The doorway giving access to it was afterwards blocked.

² Some account of this and other 'tumultuary' diggings at that time was given by B. Haussoulier (*Bull. de Corr. Arch.*, 1880,

pp. 124-7) and by W. J. Stillman (*Appendix to Second Annual Report of Executive Committee of Am. Arch. Inst.*, 1880-81, p. 47 seqq. with a rough plan, omitting the characteristic reveals of the door-jambs). For a copy of this imperfect and misleading record see Perrot, *Grèce primitive*, vi, p. 460, Fig. 162.

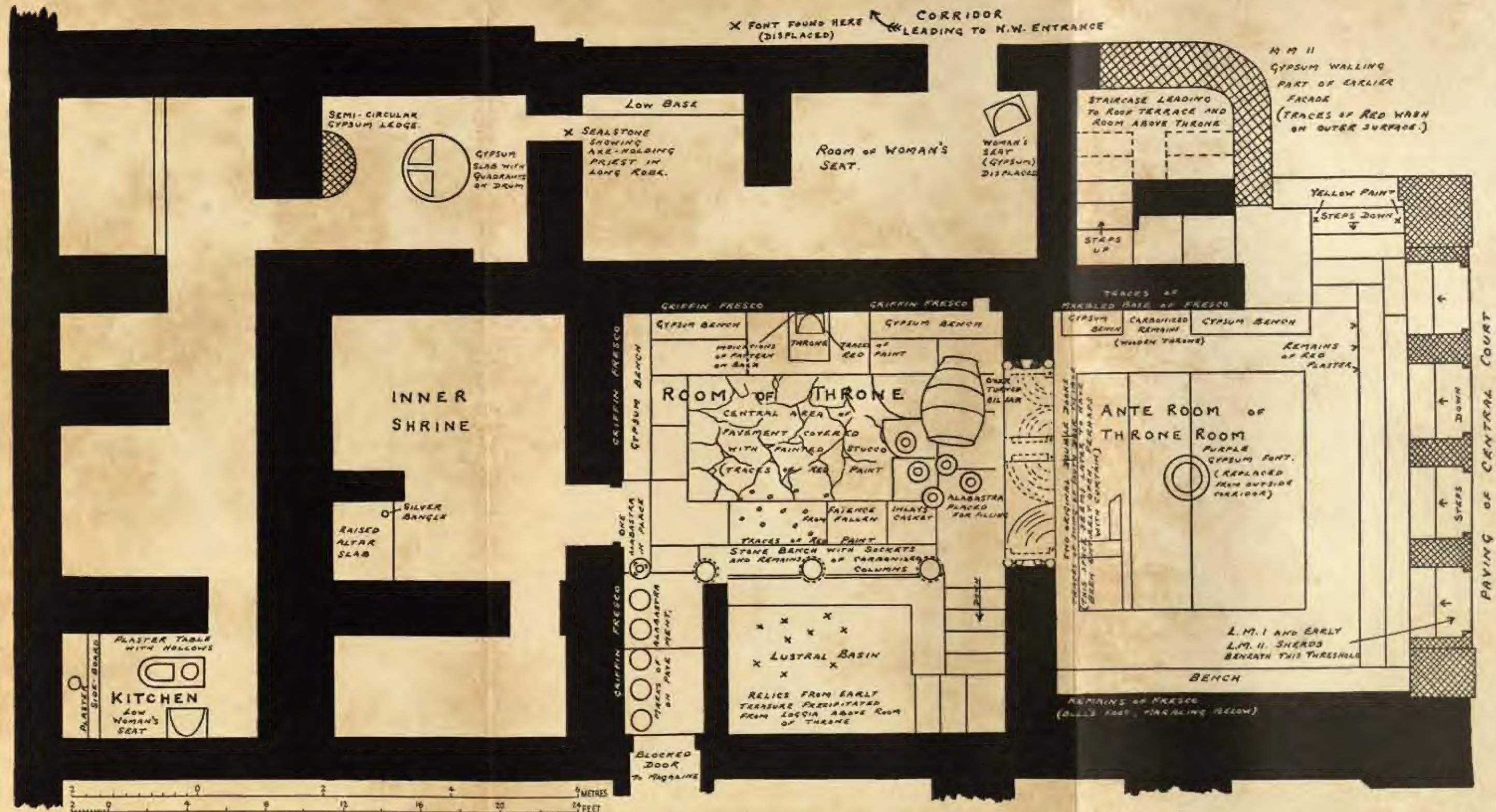


FIG. 877. GROUND PLAN OF BLOCK CONTAINING THRONE ROOM SYSTEM AND SERVICE SUITE TOGETHER WITH NOTES ON FINDS AND DETAILS.

time, under the existing conditions, had exploration advanced a few steps farther into the 'Room of the Throne' itself, there is not the slightest



FIG. 878. ROUNDED CORNER OF GYPSUM ORTHOSTATS OF EARLIER FAÇADE LINE ENCLOSING STAIRCASE TO UPPER STRUCTURES OF 'THRONE ROOM' SYSTEM.

probability that the remains of the frescoes could have been preserved, or the throne itself saved from probable deportation.

The Ante-room (see Plan, Fig. 877) was entered from the Court by four doorways, showing the usual jambs, from which four descending steps led to the paved floor, 1.85 m. beneath the surface of the ground at this point. The centre of the pavement consists of one of the usual squares formed of irregular iron-stone blocks, this in turn being surrounded by gypsum slabbing. The low doorways terminated North in a limestone pier, opposite which a narrow passage led to a winding staircase constructed within the rounded end of the gypsum corner (see Fig. 878) of the earlier façade line.¹ The blocks of this were here incised with the 'branch' sign

Ante-
room of
'Room of
Throne'.

¹ This curved corner of the old façade seems, as already noted, to answer to a similar curve—diagonally opposite in a very early walled area—of which we have the traces in

in the well-defined form in which it frequently recurs on the earliest base-blocks of the Palace. A gap of about 13.50 metres (45 ft.) here occurs



FIG. 879. VIEW SHOWING WEST BENCH OF ANTE-ROOM AND, BEYOND PROJECTING WALL-END, THE NORTH SIDE OF THE 'ROOM OF THE THRONE' BEYOND.

between this corner-piece of the old façade line and its continuation on the Southern border of the 'Stepped Porch'.

Traces of
bull-sport
frescoes.

On each side of the Chamber were low gypsum benches. That to the left on entering was continuous along the whole length of the wall, and its base showed the 'marbled' band and bull's foot illustrated above.¹ A red strip was visible beneath the 'marbled' band, and there were traces of a red wash on the pilastered face of the seat below. (Cf. Suppl. Pl. LXIII.)

Against the North Wall of the Ante-chamber were two similar gypsum benches with an interspace answering to the arrangement also found in the 'Room of the Throne' itself. Here and above the bench to the right were also traces of the same 'marbled' band as that on the opposite wall, as well as of red colouring below. The seats themselves, the slabs of which somewhat projected, were about 34 centimetres above the pavement

the base-slabs of the older façade North of the original Western Entrance of the Palace (see above, Pl. I, p. 57. Fig. 34, Isometric

view), and cf. *P. of M.*, i, pp. 139, 140, and Fig. 102, and ii, Pt. II, p. 661 seqq.

¹ See above, p. 893, Fig. 872.

level¹ (see Fig. 879 and Suppl. Pl. LXIII), and their slabs had, as in other cases, rested on horizontal wooden beams, since carbonized.

In the interspace between the two benches the floor was also covered with a mass of carbonized material, the true import of which was only realized after the discovery of a gypsum throne in a similar position in the adjoining chamber. The seat of honour had here been of wood, a circumstance which gains additional interest from the conclusion, demonstrated below, that the gypsum throne was itself a copy of a wooden original, and its form and decoration bound up with the wood-carver's craft.

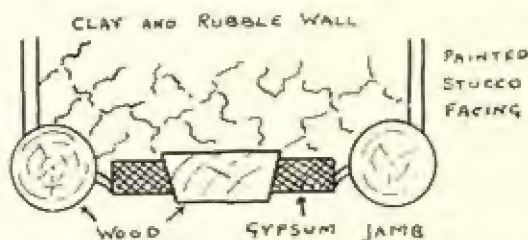


FIG. 880. SECTION OF ENDS OF PROJECTING WALLS AT ENTRANCE OF 'ROOM OF THRONE'.

To the West of the Ante-room was an opening about 3.25 metres (10 ft. 6 in.) wide, with walls projecting on either side—that to the left twice as much as the other—leading into the more important inner chamber (Fig. 879). Both wall-ends here showed an interesting arrangement consisting of two corner posts and a central pilaster of wood and gypsum bars—the remaining surface of the rubble core of the wall being coated with thick plaster with an exceptionally hard yellow facing (see section, Fig. 880). The woodwork, though reduced to charcoal, was fairly preserved at the time of excavation.

Opening
W. into
'Room of
Throne'.

Interesting evidence also came to light that this finish to the two wall-ends of the opening between the two chambers had been preceded by an earlier system consisting of two pairs of double doors with a narrow central pier. Traces of the gypsum jamb at the Southern end of these were accompanied on the adjoining threshold slabs by the actual marks of the swing of the door (see Plan, Fig. 877), such as were found in other cases.²

Double-
doors to
opening
later re-
moved.

Experience seems to have shown that a wider opening here was more convenient, and it may be supposed that privacy, when needed, was secured by means of a double curtain hung across the opening.

The 'Room of the Throne'.

The adjoining surface area, West, that was next attacked by the spade was the scene of one of the great surprises of the whole excavation.

Excava-
tion of
'Room of
Throne.'

¹ The benches on this side were slightly higher than that on the South Wall. ² See *P. of M.*, iii, p. 320, Fig. 213.



FIG. 881. 'ROOM OF THE THRONE' IN COURSE OF EXCAVATION.

Here, only about a foot below the rough herbage, there began to come into view rubble walling of the usual construction, with remains of painted plaster attached to its Southern face. A little below this, again, appeared



FIG. 882. CORNER OF BALUSTRADE WITH STEPS DESCENDING TO 'LUSTRAL BASIN': AT THE ANGLE, BASE OF WOODEN COLUMN.

the curved top of what, when fully cleared of earth and debris, proved to be the arched back of a finely carved gypsum throne, partly embedded in the plaster coating of the wall, while on either side of this, after a short interval, there appeared two gypsum benches lower in height, beside and above which were further remains of wall-painting. The throne and seats lay on the border of a paved area, the actual clearance of which is seen in Fig. 881.

On the South side of this paved area, opposite the gypsum throne, there was now uncovered a balustrade of the same material, flanked by a similar low bench (see Figs. 882 and 883). The back of this showed sockets in which, at the moment of excavation, remains of three carbonized columns still stood, though the charcoal proved to be too friable to hold together when deprived of the deposit that had cased them round. The coping of the balustrade was found to overlook a small lustral basin of the usual sunken kind. This was approached by a descending flight of steps which, like its paved floor and the lining slabs round, were also of gypsum (Fig. 882).

Wall-paintings, carved gypsum throne, benches, balustrade, and sunken basin.

Above this basin, on three sides, the surrounding wall-sections were covered with fine plaster, painted a Venetian red, and exceptionally well preserved. At 1.28 metres above the slabs lining it the sunken basin was traversed by a band consisting of four coloured strips, successively light and dark grey, Venetian red with white edges and, again, light grey¹ (Fig. 883).

A view of a large part of the 'Room of the Throne', and a section of its Ante chamber beyond, taken from the South-West, immediately after its clearance, is given in Suppl. Pl. LXIII. The best detailed idea of the arrangement and interior disposition will be given by the Plan, Fig. 877, as well as by the restored view of the whole in the Coloured Frontispiece to Part II of this Volume.

In the case of this chamber, indeed, the existing materials were so full—being enhanced by the fact that the furniture itself was fixed in its position—as to make possible a restoration as complete as anything of its kind to be seen at Pompeii—there a millennium and a half later in date.

Indica-
tion exis-
tence of
clere-
story over
basin.

The height of the chamber itself must have been inconsiderable—including a possible upper band, not more than two and a half metres (c. 8½ ft.). But it must be realized that its ground floor section formed in fact the lower part of a double arrangement with a gallery above of the same form. It resembled, in fact, the lower of two boxes at a theatre. Both the 'Room of the Throne' itself and that above looked out on to the same light-area descending to the Lustral Basin, which itself was in all probability provided with a kind of lantern or clerestory above.

Relics
precipi-
tated
from
Loggia.

It is clear that various precious relics were, as described in detail, precipitated from this upper 'Loggia' into the 'Lustral Basin' below at the time of the final catastrophe. Any ceremony of anointing carried out in this small sunken area would have been equally visible from the upper balustrade. A parallel here suggests itself with the way in which the West Light-Area of the 'Royal Villa' served both the upper and the lower floors, so that the master of the house sitting there on his seat of honour might have listened to music played in the Upper Megaron.²

Marbled
band and
Griffin
frescoes.

Over the imitation marble strip that forms a kind of dado round three of the wall-sections—in two cases immediately above the benches—runs a frieze, the background of which displays flowering reeds against waving bands, alternately ivory white and Venetian red, which originate in a conventionalized Minoan version of a rocky landscape, recalling those of

¹ See Mr. Theodore Fyfe's drawing, *Painted Plaster Decoration at Knossos: R. I. B. A. Journ.*, x (1902), p. 111, Fig. 4. ² *P. of M.*, ii, Pt. II, pp. 409, 410, and Fig. 238, p. 412.



FIG. 883. VIEW OF 'LUSTRAL BASIN' WITH BALUSTRADE AND ADJOINING BENCH, THE CARBONIZED WOODEN COLUMNS RESTORED.

the 'Procession Fresco'.¹ Each of these wall-sections is broken in the middle by a special feature, in one case the gypsum throne, in the other a doorway leading to an inner shrine, the altar-ledge of which, together with the sacred images that it once bore, would be framed by it (see Frontispiece). In conformity with this arrangement, the fresco friezes decorating the two pairs of wall-sections present, as a central religious feature, two couchant Griffins, guarding in one case a vision of the Goddess herself and her divine associates on the altar ledge beyond, in the other the seat of honour of her terrestrial vicegerent, the Priest-king.

Of the Griffins, the figures of which repeat one another, the most completely preserved was not unnaturally that in the more narrowly enclosed space to the left of the doorway leading to the inner shrine, and towards which its head was directed. As can be seen from the coloured illustration (Plate XXXII), the body is of a pale yellow hue, the tail showing a faint bluish tinge. The outer plumes of the monster's crest recall those of the 'Priest-king' fresco, and in that case the blue eye visible at the end clearly betrays an imitation of those of a peacock. No such precise indication is here given, but the plumes are seen to curve round an inner scroll formed of the 'waz', or sacral papyrus wand, between two spirals (Fig. 884). Both this and the pendent papyrus spray on the neck—more literally rendered—and the rosette (or facing papyrus) in the coil beside it, show a distinct relationship to decorative fresco bands on the Palace walls already described.²

The width of the picture frieze was 1.02 metre, just three times the height of the benches from the pavement, which was 34 centimetres. It is further observable, as illustrating the minute accuracy of the scale and proportions with which the L. M. II decorative artists worked, that, immediately above its upper border of two white lines, is a Venetian red band or frieze of exactly the same number of centimetres in height. This is again bordered above by two white lines surmounted by a red band, the upper margin of which is unfortunately lost (Fig. 885).³

Direct relationship and contemporaneity between the 'Griffin Frieze' and that depicting the large Argonaut illustrated above,⁴ is established by the practical identity of the background in both cases. Here, too, we see the same reeds with their 'papyrus' flower against the same waving bands

Features
of
Griffins.

Conven-
tional
reeds as
'Argon-
aut'
Frieze.

¹ Cf. *P. of M.*, ii, Suppl., Pl. XXVII. In this case the bands are divided by narrow fringes.

² See above, pp. 875, 876, and Figs. 865-7.

³ From Mr. Theodore Fyfe's drawing, *R. I. B. A. Journ.*, x (1903), p. 111, Fig. 6.

⁴ See above, p. 890, Fig. 870.



Fresco of wingless griffin, couchant between papyrus reeds,
over marbled dado: 'Room of the Throne'



FIG. 884. FORE-PART OF GRIFFIN SHOWING PLUMES AND PENDANTS WITH REED IN FRONT. WAVED SECTIONS OF BACKGROUND, ALTERNATELY WHITE AND RED, VISIBLE BETWEEN.

alternately white and red. Though the 'flower' itself is Egyptianizing, the genesis of the radiated shoots of these conventional plants can in fact be traced back at Knossos to the palm-branches of M. M. III pictorial Art.

Of these sprays as a characteristic feature of L. M. II decorative

motives more will be said below in connexion with a remarkable polychrome charcoal-burner from the 'Temple Tomb'.¹ As seen on the painted pottery of Tell-el-Amarna, this feature, indeed, must be regarded as of Minoan origin.

Along the Griffin's back runs a curious decorative chain of ovals and double dots (see Fig. 884), which, though here assimilated to the beads of a necklace, recalls the inner line of ovals on the tentacles of the Argonaut, as shown in Figs. 870, 871, above.² In that case, however, they are easily recognizable details of the cephalopod's suckers.

Hatched shading of Griffin's body: early Chiaroscuro.

In one technical detail the Griffin as here depicted is of unique interest in the History of Art. It supplies the first recorded instance of a regularized attempt to render Chiaroscuro. The shading of the lower contours of the body and of the legs is given by means of closely set and, in most cases, hatched lines—a method which might rather be thought to have originated in line engraving applied to figures on a flat surface (see Fig. 886 *a, b*). That this linear method has been used to express shading in the case of a painted design was doubtless itself due to the inexperience of the artist in manipulating nuances of varying depth in the same colour. Such colour shading, indeed, was already known in the remote Age of Cave Man—witness the brilliant representations of animals such as the deer, boars, and bisons of Altamira or the Font de Gaume. But there is no trace of it either in Ancient Egypt or the East. In Classical Greece it was hardly practised before the Hellenistic Age, to become later one of the chief resources of Renaissance Italian artists. It is curious to note, however, that this later form of linear shading, such as was first popularized by Gutenberg's Art, must be regarded as the imitation of what was already

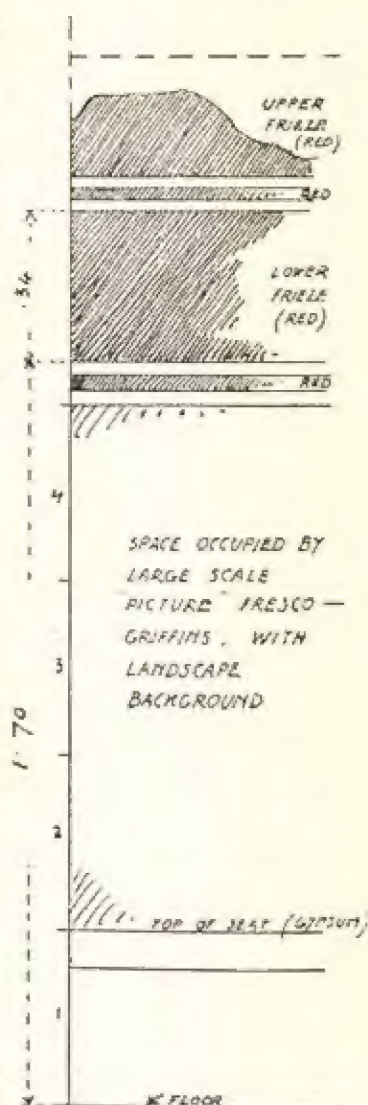


FIG. 885. ARRANGEMENT OF PICTURE FRESKO AND BANDS ON WALLS OF 'ROOM OF THE THRONE' (THEODORE FYFE).

¹ See below, p. 1011 seqq., and Coloured Plate XXXV.

² See pp. 890, 891.

universal in colour technique, whereas in the case of the Knossian Griffins it is impossible to point to any antecedent of that kind.

The artist who painted the Griffins may, indeed, have received a sugges-

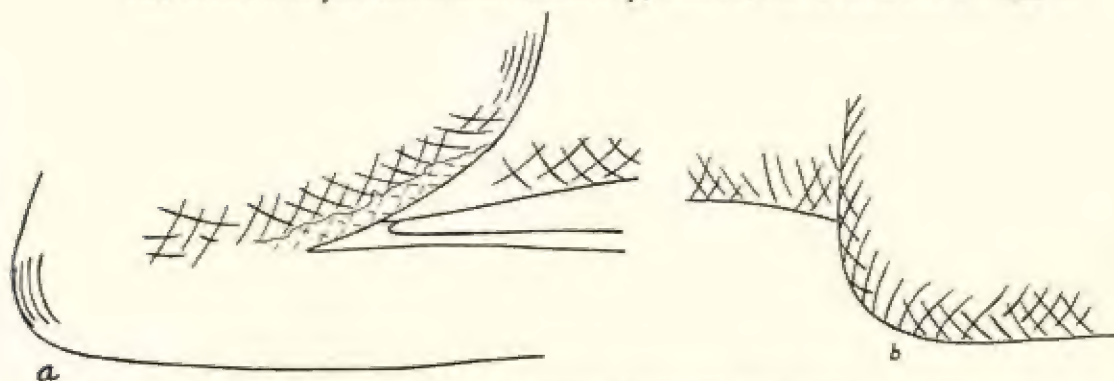


FIG. 886 *a, b*. HATCHED SHADING ON LOWER CONTOURS OF GRIFFIN: ANTICIPATION OF CHIAROSCURO.

tion from the hatched rendering of the hair or other details in the engraved and inlaid designs of animals on the Minoan blades. But an exhaustive examination of these has failed to discover anything in the nature of shading.

The Wingless Griffin.

From the point of view of the History of Religion the fact that the Griffins here were wingless is quite unparalleled. This is the first, and apparently the last, time in Ancient Art that we see a Griffin without wings. The monster itself is of a compound class very early known on the banks of the Nile in the shape of a lion with the head of a hawk. This, indeed, is already foreshadowed by a remarkable two-winged monster with a beak that appears in a processional series of beasts of prey seizing their quarry—after three scenes in which lions take part—on the gold-plating of a flint knife from a late prehistoric Egyptian tomb¹ (Fig. 887). Wings disposed in the same curious manner reappear on a hawk-lion from Beni-Hasan of XIIth Dynasty date (Fig. 888, A).

Unique appearance of wingless Griffin.



FIG. 887. WINGED BEAK-HEADED MONSTER ON GOLD PLATE OF A FLINT KNIFE (1).

The hawk-headed Griffin was not without influence on some Minoan and Melian types, as will be seen from the comparative series here given

¹ J. de Morgan, *Recherches sur les Origines d'Égypte*, p. 115, Fig. 136, said to be from the Prehistoric Cemetery of Saghel-el-Baglieh.

Similar exquisitely chipped flint knives recur at Hierakonpolis.

(Fig. 888). But the true Minoan version was stronger, and, as is well shown on a Zakro sealing,¹ had the crested head of a long-beaked eagle.

It is the softened, Egyptianizing version that we see here in Fig. 884.



FIG. 888. EGYPTIAN HAWK-HEADED GRIFFINS AND MINOAN DERIVATIVES.

This milder aspect is further enhanced by the peacock's plumes and rich festoons showing the original sidelocks—Hathoric in association—of the prototype in a purely ornamental form. This exceptional wingless representation is possibly due to some assimilation with the Egyptian Sphinx,² but this, too, is preferably winged in Minoan Art.

Were wingless Griffins, perhaps—like a Fortune, with no 'swift wings' to spread—regarded as better embodiments of the settled spirit of guardianship within the House of Minos?

In Minoan Art itself—as throughout Classical and later times—the Griffin is the very symbol of swift motion, often expressed—as on the dagger-blade from Mycenae—by the 'flying gallop' as well as by the wings.

The lion by itself, neither winged nor eagle-headed, was, as we have seen, the more usual guardian both of the Goddess and of her youthful male consort. On the 'Ring of Nestor',³ a couchant lion, tended by the

¹ *P. of M.*, i, p. 712, Fig. 536, a (cf. too Figs. 286-8, and p. 425, Fig. 291).
Fig. 888, n.

² *P. of M.*, iii, p. 154, and see Coloured Plate XX A.
³ For small figures of the wingless Hittite Sphinx, see *P. of M.*, iii, pp. 420, 421, and

Goddess's two little handmaidens, guards the entrance of the Under-World. There a winged Griffin is enthroned on the judgement seat.

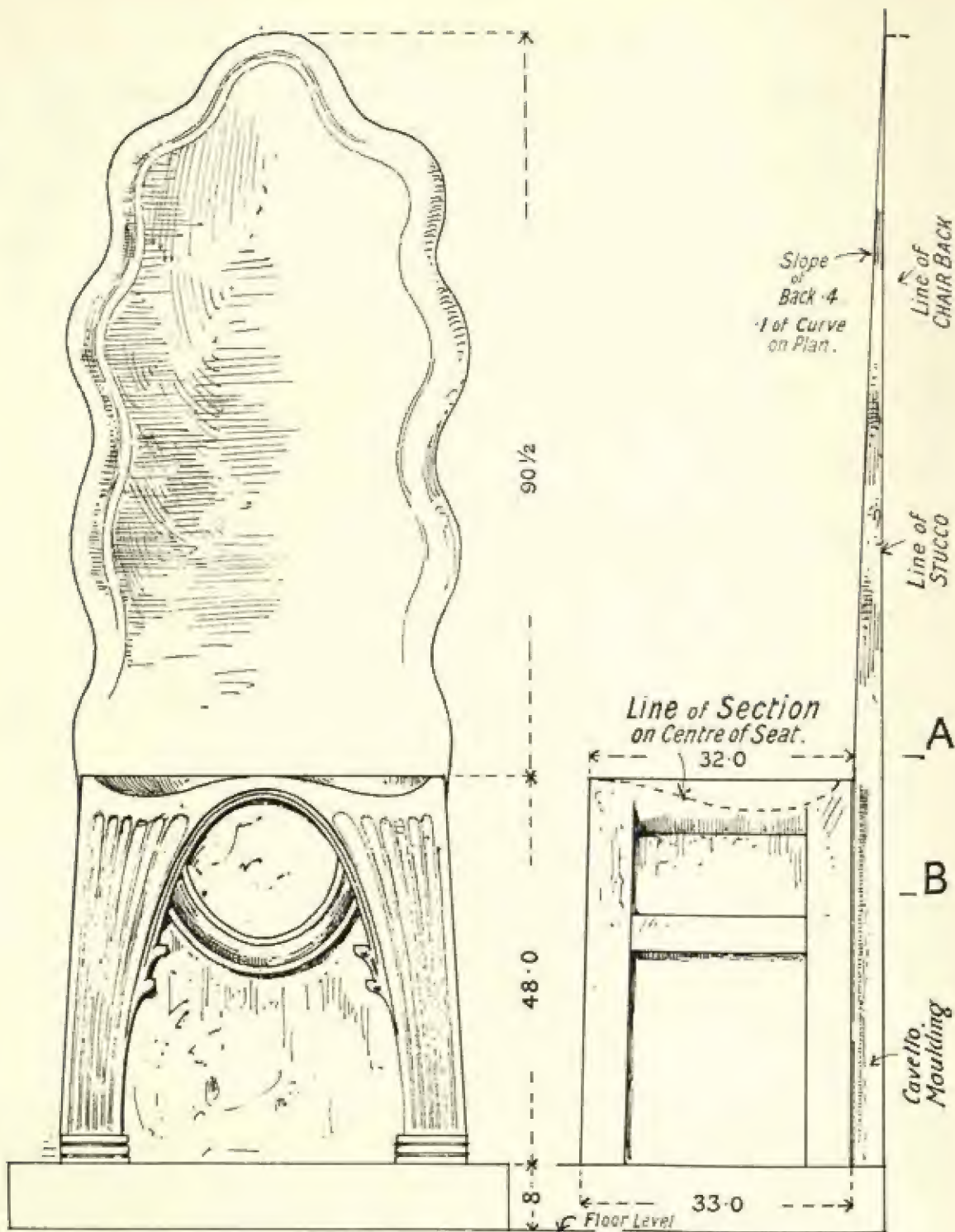


FIG. 889. THE GYPSUM THRONE AS FIRST EXCAVATED.

The Gypsum Throne.

On the North wall of the Chamber couchant and composite Griffins guarded the gypsum throne, and at the same time the Priest-king—after 'the order of Melchizedek'—who from it presided over his Consistory seated on the benches round. From here too he may have overlooked the ceremonies of anointment in the sunken basin opposite. As first excavated,

The
Gypsum
Throne.



A. FRONT ELEVATION

B. SIDE ELEVATION.

FIG. 890. FRONT AND SIDE ELEVATION OF GYPSUM THRONE, BY THEODORE FYFE.

with painted plaster still clinging to the wall beside it, it is here reproduced in Fig. 889).

The details of this seat of honour can be best understood from Mr. Theodore Fyfe's elevation and sections shown in Fig. 890. Its total height to the summit of the back, apart from the base-slab, is 138.05 centimetres, or as nearly as possible five feet. The back rises 90.5 centimetres,

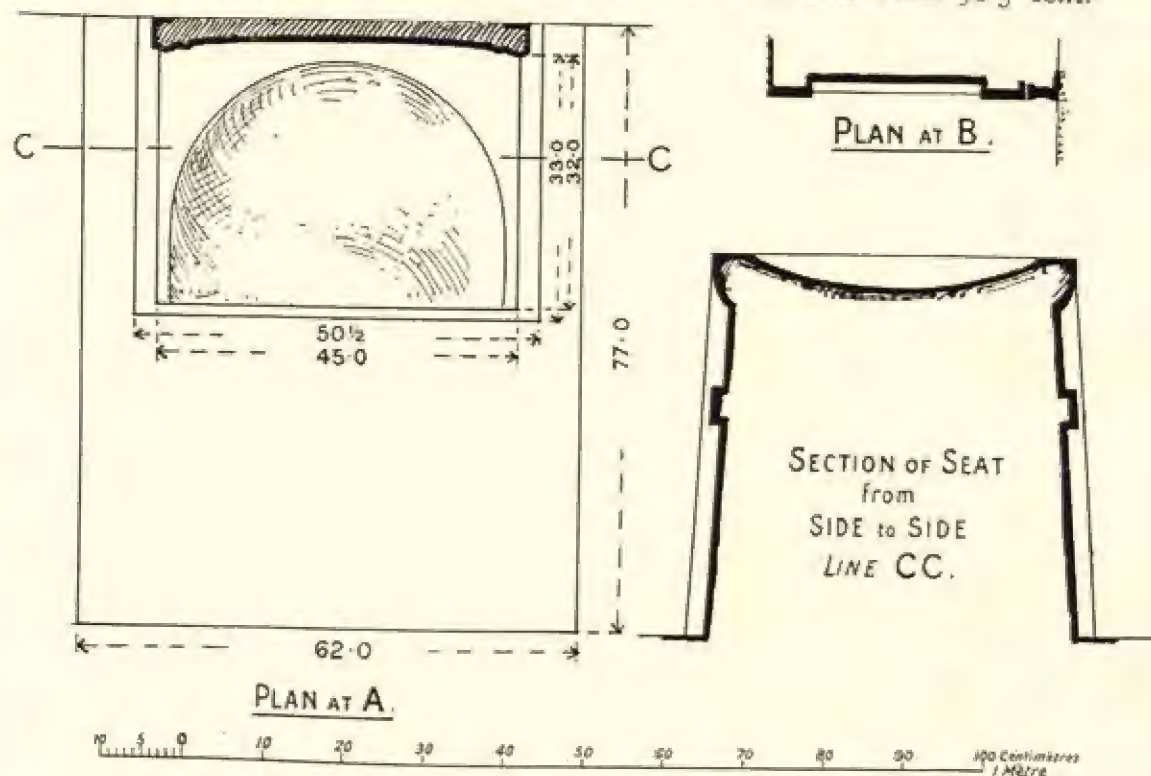


FIG. 891. PLAN AND SECTION OF GYPSUM THRONE, BY THEODORE FYFE.

metres above the seat, the height of which is 48 cm. (*c.* 1 ft. 7½ in.)—slightly higher than an ordinary English chair. The back is made in a single piece, sloping slightly back from the level of the back of the seat, so that the upper part was embedded in the plaster, as shown in Fig. 890. It is of undulating outline, which has been compared to that of an oak-leaf, with a rolled border showing an inner groove. That its inner surface was once covered with an elaborate painted design may be gathered by the appearance of remains of a thin plaster coating, showing traces—only perceptible as the result of minute examination at the time when it was uncovered—of impressed parallel lines, horizontal and vertical, such as both in Egyptian and Minoan Art were used for the guidance of artists. Traces of a white and red

Traces of
coloured
designs.

wash were also found on the front and sides of the lower part of the Throne.

¹ Gothic
crockets.

The surface of the seat was carefully hollowed out so as to suit the comfort of its occupant. The upper line of its front elevation thus gradually falls away from the centre in two curves adapted for the thighs (Fig. 890 A), and this central rise in turn forms the starting-point for a very elegant feature in the design. Its curve is developed downwards on both sides, supplying the inner border of two pilasters, which with their delicate fluting, expanding above in a fan-shaped form, are of true Minoan inspiration.¹ Though not actually pointed, this arch, cut into the solid gypsum block of which the seat itself consists, presents—especially in the side view as seen, for instance, in Fig. 895 below—a distinctly Gothic aspect. This appearance, moreover, is enhanced by the crockets, resembling buds of foliage, that shoot out from the pillars on either side and which, seen by themselves, might well be taken to belong to a date nearly as long after our Era as their real date is before it. (See section of moulding, Fig. 892.)

Counter-
arch and
evidences
of wood-
work
origin.

A remarkable feature of the arch itself is the boldly modelled counter-arch below it, which in the stonework has the appearance of an uncalled-for element in the design. But its insertion is not difficult to explain. The side view of the throne, as seen in Fig. 890 B, with its cross-bar in relief, would alone be sufficient to show that the original of the whole is to be sought in woodwork. As thus constructed, the hollowing out of the front border of the seat on both sides, for the convenience of the sitter, had necessarily a somewhat weakening effect on the curved section that joined the two pillar-like front legs. This weakness was therefore made up for by a counter-arch below—a method also familiar to Gothic architects as a means of rectifying the instability of chancel arches, of which we have a familiar instance in Wells Cathedral.

¹ Compare the flutings on the alabaster vase from the Treasury of the Central Sanctuary (*P. of M.*, ii, II, p. 821, Fig. 537, r).

Section of Moulding



FIG. 892. SECTION OF Moulding OF FRONTAL ARCH OF THRONE.



FIG. 893. WOODWORK RECONSTRUCTION OF THRONE.

The genesis of the gypsum throne from woodwork was itself so obvious that it seemed worth while to retranslate it into its original material. A copy of this work as executed by an Oxford wood-carver is given in Fig. 893. Since, moreover, the heap of charred remains between the benches on the North wall of the Ante-room, and answering in position to that of the Gypsum Throne in the inner Chamber, had evidently belonged to a seat of honour there, it has been thought legitimate to replace it with the wooden replica.

Carbonized remains of wooden throne in Ante-room.

Painted Representations of Altar-bases on either Side of the Throne.

On the lower part of the wall on either side of the Throne—inserted into the imitation marble dado—were incurved objects, Fig. 894, which must certainly be regarded as conventionalized representations of the well-known Minoan type of altar-base with incurving sides.¹ A pair of

Representations of incurved altar-bases.

good examples of these in relief combine to support the baetylic column,

¹ For the history of this altar form see *P. of M.*, ii. Pt. II, pp. 607, 608.

and the fore-feet of the two lions of the Mycenae gateway. A striking religious parallel indeed is here presented by the altar-base as thus depicted beside the throne and the semi-divine personage that once occupied it, and that beneath the sacred pillar of the Lions' Gate—itself the equivalent of the Godhead—which was also confronted by guardian monsters. In the youthful long-robed figure on the seal-types described below¹ we may perhaps recognize the last occupant of the throne itself.

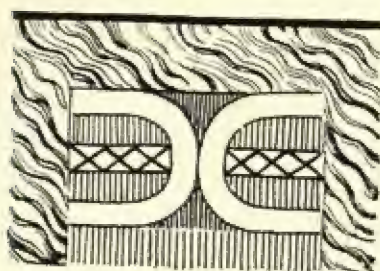


FIG. 894. DESIGN SHOWING IN-CURVED ALTAR-BASES ON EITHER SIDE OF THRONE.

This aspect of the throne as forming the centre of a religious composition is well brought out in the photographic view (Fig. 895) of this side of the Chamber with the painted stucco designs on its walls as restored, showing on either side of it the altar-bases and confronted Griffins.

The Inner Sanctuary.

Inner
Sanctuary
with altar
ledge.

The religious associations, suggested by so many elements in the 'Room of the Throne' itself, were heightened by the vision—already referred to—opened out by the doorway in its West side on the altar ledge of the small inner chamber beyond. (See Plan, Fig. 877.) The images of the Goddess and her votaries, the Sacral Horns, and Double Axes, such as once had been placed here, had disappeared. A silver armlet and some goldfoil found on the ledge were themselves outliers from a Treasure, the bulk of which, as described below, was found in and round the Lustral Basin of the adjoining area. The little Shrine itself was flanked by a wall projection. This Sanctuary chamber, which only received borrowed light through the doorway, must have been very dark, and the discovery here of a high-pedestalled stone lamp was quite appropriate. A still darker cell—perhaps a store-room, but void of contents—opened into it on the North side. (See Plan, Fig. 877.)

The 'Room of the Throne' in Relation to the Surrounding Structures.

The
'Throne
Room'
Suite.

The 'Room of the Throne' only stood in connexion beyond with this little sanctuary. The narrow passage-way South, behind the Lustral Basin, led to a Magazine, later blocked, belonging to the Earlier Palace system. The whole of this ground-floor area, entered by the Ante-room

¹ See below, p. 925 (cf. p. 414, Fig. 343, *b*) and p. 946, Fig. 914 *bis*.



FIG. 895. 'ROOM OF THE THRONE' LOOKING NORTH-WEST, SHOWING THE WALL-PAINTINGS AS RESTORED BY MONSIEUR E. GILLIERON, FILS.

from the Central Court and specially devoted to ceremonial usage by the Priest-king, thus formed a separate enclosed area.

Upper
room con-
nected by
Winding
Stair-
case,

At the same time, by means of the winding staircase at the North-East corner of the Ante-room, this lower official enclave was brought into direct connexion with an upper-floor system extending West to the North End of the 'Upper Long Corridor'; and this itself supplied a link with the whole *Piano nobile* region, including ultimately the Palace entrances to the South, West, and North-West. (See Revised Plan at end of Volume.) On this level, too, the entrance passage that opened at the foot of the staircase and skirted the area of the Early Keep conveniently led to what has been above characterized as the 'Pilgrims Entrance' by the old 'Initiatory Area'.

'Loggia'
above
'Room of
the
Throne'.

This flight of stairs, constructed as we have seen within the rounded angle of an important *insula* of the Early Palace, gave access in the first instance to a roof terrace over the Ante-room, which does not seem to have had any other structure above it. Thence, however, it would have only been a few steps to an entrance, which must be here postulated, to the room immediately above that of the Throne. It is natural to suppose that the balustrade would in this case have run round three sides of the light-well above the 'Lustral Basin', so that there was an interspace between its shaft and the walls East and West of it. In the plan of restoration executed by Mr. Piet de Jong, of which a photographic view is given in Fig. 897, a 'lantern' has been constructed immediately over the light-well and the Lustral Basin below, reproducing the probable method by which they were originally lit. By this means, even when the opening on the Ante-room side was closed, a 'dim religious light' would have been diffused through the 'Room of the Throne' itself.

Lantern
above
Lustral
Basin
restored.

Upper
room
used for
Gallery of
fresco
copies.

The upper chamber—so easily accessible—from that of the Throne, thus formed a kind of 'loggia', overlooking the 'Lustral Basin' in the same way, but at a higher level. It was conveniently placed to act as a kind of 'withdrawing room' for the *Papa Rē* himself. Not only would it have served as a place of rest and refreshment, but it was better adapted than the 'Room of the Throne' itself for overlooking ritual functions in the sunken area below.

The numerous relics—obviously heirlooms from M. M. III—which, as is shown below, were precipitated into the Lustral Basin from the room above that of the Throne, sufficiently indicate that chests containing valuables were here stored, some of the highest artistic merit, such as the miniature painting of the charging bull on the back of a crystal plaque.

It has been thought not inappropriate to arrange on the walls of this



FIG. 896. 'PALACE PICTURE GALLERY'—COPIES OF FRESCOS ARRANGED ON WALLS OF THE RESTORED LOGGIA ABOVE THE 'ROOM OF THE THRONE'.

upper 'loggia', as conjecturally restored for the better preservation of the spaces below, a series of painted plaster copies by Monsieur E. Gilliéron, fils,



FIG. 897. 'STEPPED PORCH' AND 'THRONE ROOM' SYSTEM AS RESTORED, SHOWING ANTE-CHAMBER AND TERRACE ROOF, UPPER 'LOGGIA', AND 'LANTERN'.

of fresco designs from the site that could not be replaced—as has been feasible in other cases—in their original position on the walls. An interior view of the upper chamber thus reconstituted and decorated is given in Fig. 896.

The 'Service' Section.

Structurally considered, the Ceremonial apartments are inseparable from an extensive basement suite, which, though not connected with them below by so much as a single doorway, forms in fact an integral part of this Palace block, and, from the economic point of view, was no less incorporated in it. This was clearly the Service Section, and its seclusion may be largely due to the fact that it seems to have been part of the women's domain. That it was brought into connexion with the upper floor of the Official

Service
quarters
in base-
ment
section.

Quarter by means of a small staircase running up from one of its back compartments, is, as pointed out below, extremely probable. On the other hand, its back door opened on the same paved corridor that was approached, only a few paces East, from the corner entrance of the Ante-room.

In the corner immediately behind this back door, though somewhat displaced, there came to light on the plaster floor what must be regarded as a woman's seat, consisting of a thick limestone slab hollowed out above like the Throne (see Plan, Fig. 877) to fit the curves of the body, but of somewhat ampler proportions, and in this case, as in that supplied by another example on the Kitchen floor beyond (see below, Fig. 899), raised only about five inches above the pavement level. By this entrance doorway there seems to have squatted a female porter. In the small adjoining room¹ was a low ledge of blocks jutting out from the base of the outer wall, the stump of an earlier and thicker wall-line, perhaps also used as a bench.

Woman's
seat in
entrance.

It is interesting to note that on the threshold of the doorway leading from this 'Room of the Stone Bench' to that adjoining it to the West was found the clay impression with the axe-holding, priest-like figure described above,² clad in a long winding robe, and which, like similar signet types, may well represent an actual Priest-king. Beside him was the dolphin badge of sea power. The figure is apparently youthful, and corresponds with that of a better executed intaglio from Vatheia, East of Knossos, both in its long robe and Syro-Egyptian Axe.³ Have we here the actual signets of the last Priest King? This room presented an enigmatic feature.

Stone
drum with
sunken
quad-
rants,

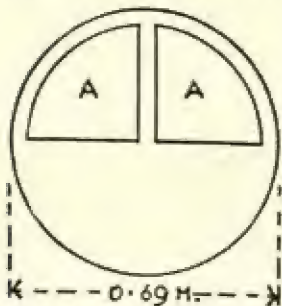


FIG. 898. 'STONE DRUM':
UPPER PLAN.

About 1.50 metres from its West wall and 1 metre from that to the South stood the limestone drum of a column 0.69 centimetres in height and the same in diameter, resting, without a base, on the cement floor. The Eastern half of its flat top was cut out into two shallow quadrants, as seen in Fig. 898, the base of these running almost exactly towards the magnetic North. Against the West wall of the room, cemented into its plaster, and near the column drum, was a thin gypsum slab of semi-circular form, standing about the same height as the top of the pillar.

It is evident that the purpose of the column drum and the semicircular slab was in some way connected. They must both have been made use of

¹ The door of this room had been later blocked with a wooden partition and had at first been regarded as a cupboard. Under the block-

ing were found remains of tablets of Class B.

² See pp. 413, 414, and Fig. 313, *b*.

³ See below, p. 946, Fig. 914 *bis*.

by a person in a standing position. The two quadrants of the column drum, their orientation, and the exact correspondence between its height and diameter, might well suggest some more abstruse purpose. But its relation to the neighbouring ledge and the analogy supplied by the small kitchen at the end of the suite, containing a table and sideboard with hollows for pots and culinary purposes, certainly suggest that here too the object in view was of a domestic kind, connected perhaps with food. It must be borne in mind, moreover, that the quarter in which this curious object made its appearance was certainly one set apart for women.

Probable
place of
wooden
back
stairs.

The 'Room of the Stone Drum' opens on its Western side upon an elongated chamber or small gallery divided into three compartments by short projecting walls. These walls end in good limestone pillars, the upper stone of the second of which is cut down from a larger block, bearing the window sign characteristic of the first period of the building. It is highly probable that the first compartment of this gallery was originally fitted with a small wooden staircase, supplying the necessary means of communication with the upper floor. Owing, however, to its material, these service stairs—like those of the Domestic Quarter—had entirely disappeared.

Kitchen of 'Service' Section (see Fig. 899).

Kitchen
with
woman's
seat,
table, and
side-
board.

The gallery leads to a small room of considerable interest, which forms the termination of the suite with which we are dealing. Against the wall of this chamber, opposite the door, is another low limestone seat of the same form and approximate dimensions as the woman's seat noted above in the first room of the series. In this case, however, it is a fixture, firmly cemented into the white plaster that forms the flooring of the room. This seat is raised only 13 centimetres above the floor, its width is 55 centimetres, and its depth 46. These figures become very significant when set beside those of the throne, the seat of which is 58 centimetres high, 45 wide, and 32 deep. As already observed, the difference in capacity is naturally accounted for by that of the physical development of the two sexes, while the discrepancy in height is owing to the methods of sitting in vogue respectively among the Minoan men and women.

In front and on a level with the seat was a low table rounded at one end and square at the other, the surface of which was formed of a thick coating of plaster (Fig. 899). Like the seat, its table was embedded in the cement of the flooring. At the end nearest the seat was a bowl-like hollow, the other part being occupied by a shallow elongated depression

rounded at one end. There can be no doubt that this low table was designed for some kind of manual work performed by the female occupant

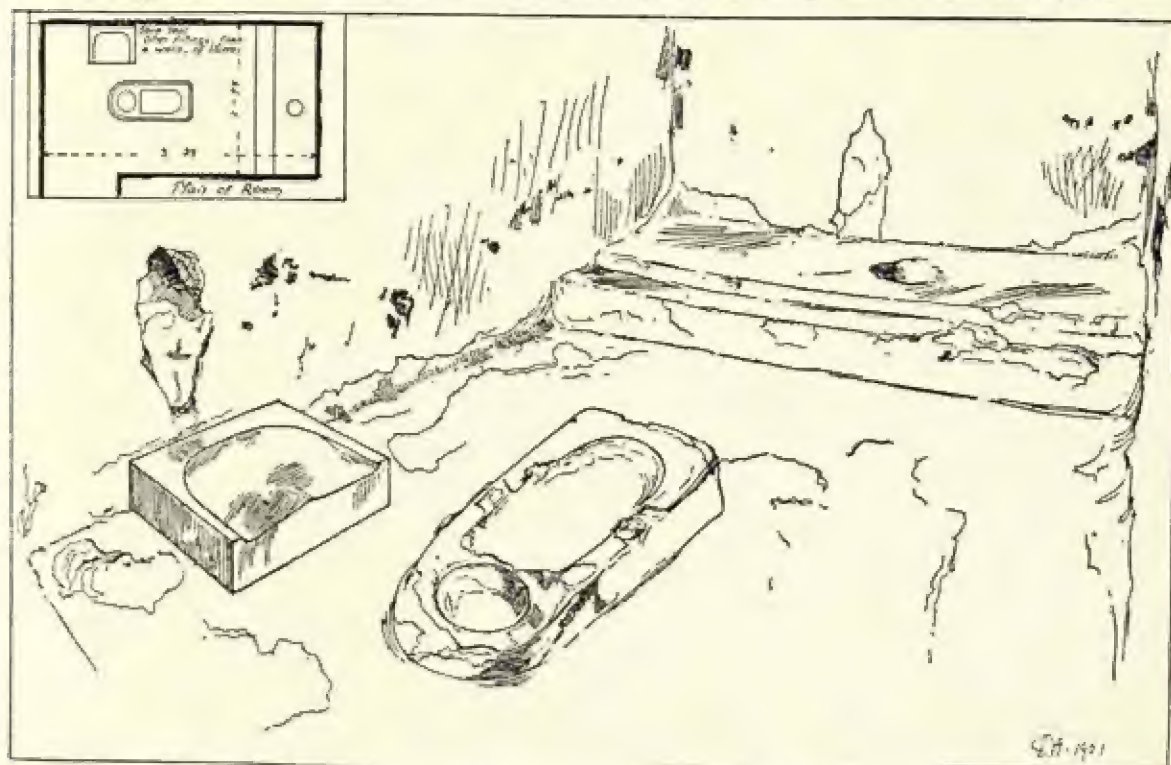


FIG. 899. KITCHEN OF 'SERVICE' SECTION SHOWING WOMAN'S SEAT OF LIMESTONE AND PLASTER TABLE AND SIDEROAD.

of the stone seat. The fact that the surface of the table was formed of plaster excludes the possibility that any kind of grinding or pounding was performed here. The material employed must have been plastic or partly liquid, and it is natural to suppose that the receptacles were used for some preparation of a culinary nature. What cooking was necessary would have been done by means of a brazier.

Along the inner wall of the room ran a kind of dais rising in a double step, the surface of which was covered with the same fine hard white plaster as the table. It is possible that the lower step served as a kind of bench like that along the wall of the second room of the present suite, while the upper may have been used as a shelf or sideboard. The centre of this shelf was hollowed into a bowl-like receptacle like that of the table. Remains of the same fine white plaster covered the walls of the chamber.¹

¹ It was at first called the 'Room of the Plaster Table': it was certainly a kitchen.

Deposit of Precious Relics precipitated into and about the 'Lustral Basin' from 'Loggia' above.

Precious
relics pre-
cipitated
in and
about
'Lustral
Basin'.

The objects found in the Throne Room area belong to two categories. Those that lay actually on the floor of the Chamber will be described in relation to its ceremonial character. But a highly interesting group of objects found dispersed among the earth, charcoal, and rubble debris within the Lustral Basin and over its borders, as well as within a little niche in the opposite wall, belong to a class apart. They are even, as will be seen, divided from the others by a chronological gap.

Pre-
sumably
derived
from
'Loggia'.

As noted above, there is every appearance that the relics belonging to this latter group had been thrown below from the 'loggia' immediately above the balustraded part of the 'Room of the Throne' itself. They may well have represented the contents of coffers placed within it and perhaps more permanently stored in some closet standing in connexion with it.

Crystal
plaques of
Gaming
Boards
and
Caskets.

The objects in precious metal had been evidently picked out by later treasure-seekers—but their character and style sufficiently show that these relics were one and all of much earlier date than the Throne-room system itself, and must have belonged to a Treasury hoard of the same transitional M. M. III *b* epoch as those of the Temple Repositories. Although, moreover, religious figurines were here absent, it is clear that many of the crystals found had served as inlays of ivory Gaming Boards such as that much more completely represented by the 'Royal Draught-board',¹ which seems to have stood in relation to the original 'Great East Hall'. Specimens of the crystal relics belonging to the Deposit are here given in Fig. 900. The plaques with edges forming segments of large circles, *f*, *k*, answer to those that framed the large medallions of such gaming tables, and the petal-shaped pieces, *l*, *m*, *n*, correspond with those set in their outer border.² The round crystals, too, recall those in the centres of the ivory rosettes along the frame of the 'Royal Draught-Board', one is hollowed below for a painted surface. So also we recognize parts of the crystal bars, —both plain, *g* and *j*, and ribbed, *s*—horizontally arranged on such tables, and sometimes, as on specimens from the Temple Repositories, executed in *faïence*.³ Rock-crystal bars like *g*—evidently belonging to a similar gaming-table—were found in the Fourth Shaft Grave at Mycenae.⁴ These,

¹ *P. of M.*, i, Coloured Plate V (opp. p. 472), and see p. 471 seqq.

² See especially, *P. of M.*, i, p. 474, Fig. 338.

³ *Ib.*, p. 475: restored draught-board.

⁴ See Karo, *Schachtgräber von Mykenai*, Pl. CLIII, where ten from this grave are reproduced.



FIG. 900. CRYSTAL RELICS FROM DEPOSIT IN AND ABOUT THE 'LUSTRAL BASIN', PRESUMED TO HAVE BEEN PRECIPITATED FROM 'LOGGIA' ABOVE.

like the others, had doubtless been overlaid on the bright blue kyanos, or at times on silver plates such as were used in a similar manner.

Crystal
plaque
with
'back-
work'
painting
of charg-
ing bull.

To what purpose disks like *p*, bossed on both sides, had been applied is not so certain, but certain carinated bosses (*q*) may well have adorned the surface of caskets made to contain other precious possessions. The remarkable crystal plaque here found (*d*), with the miniature figure of the charging bull painted in bright colours on its lower surface,¹ may have been part of the decoration of such a casket. The fragment *e* also bore traces of similar coloured 'back-work'.

Other crystal objects evidently belonged to the class of personal ornaments, such as the large crystal bead, *b*, and the parts of armlets, *l*, *u*, *v*, *r*, some ridged. The crescent-shaped jewel, *a*, may well have been mounted as the pendant of a necklace.

'Rhyton'
relief with
'am-
bushed
octopus'.

In addition to these choice crystal relics—including the finest work of the Minoan miniaturist's Art that has come down to us—this same deposit produced what is certainly the most naturalistically beautiful small relief brought to light, either in the Palace or in any other contemporary site. This is the fragment already illustrated of a grey steatite 'rhyton' of the M. M. III ostrich-egg type—with the relief of the 'ambushed octopus'.² There can be little doubt that, as in other similar cases, the relief had been covered with thin gold plating. Most of the gold, however, associated with the objects belonging to this hoard that was found in and about the 'Lustral Basin' had evidently been picked out by treasure-seekers, for whom it was an easy plate to ransack. But, inside the small wall cavity opposite, described below as containing outlying remains from the same rich deposit, a good deal of gold leaf occurred with the other choice fragments. Some was also found on the altar slab of the niche of the adjoining Inner Shrine, together with a silver armlet, both probably belonging to the same rich hoard of the Upper 'Loggia'.

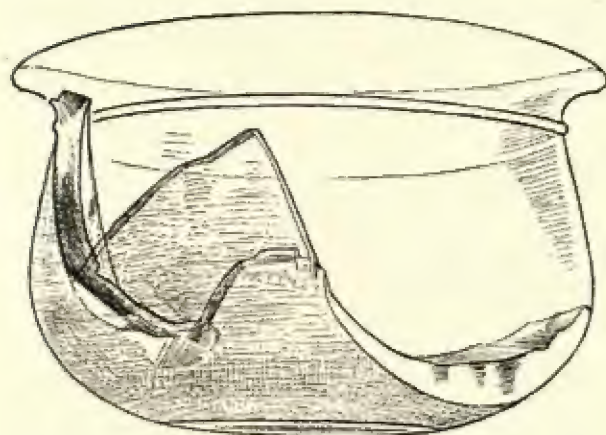
The little crystal bowl restored in Fig. 901, *a*, *b*, recalls that found, together with the small *pyxis* cover, in the 'Ivory Deposit' and derived from the Treasury Room of the Domestic Quarter.³ It is clear that

¹ *P. of M.*, iii, Coloured Plate XIX: opp. p. 109.

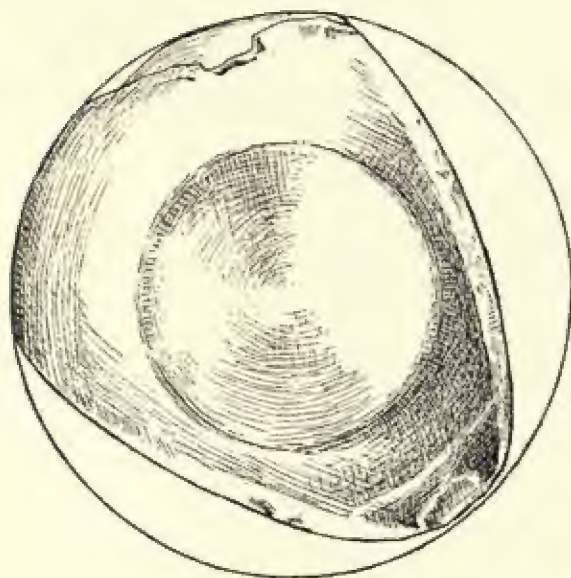
² *P. of M.*, ii, p. 227, Fig. 130, and ii, Pt. II, p. 503, Fig. 227. A crystal knob from the Third Shaft Grave at Mycenae shows a similar painted technique on its hollowed out under side, apparently in that case intended

to imitate the fine veining of some agate-like stone (Karo, *Schachtgräber*, Pl. LXXVIII, where it is first adequately reproduced from Gilliéron's drawing). Dr. Karo (*Text*, p. 284) rightly regards this object as of Cretan importation.

³ See *Ib.*, vol. iii, p. 410, Fig. 272 *a*, *b*, and *c*, *e*.



a



b

FIG. 901 a, b. SMALL CRYSTAL BOWL, 'LUSTRAL BASIN' DEPOSIT.

Palace lapidaries had access to large blocks of rock-crystal, whether Cretan or imported remains uncertain.

Crystal bowl and pommel.

A crystal pommel of a small dagger-blade, Fig. 900, c, showing its rivet-hole, also belonged to the Throne Room hoard, and it seems probable that the specimen, Fig. 902, also formed part of this deposit.

Clearly the Palace *ateliers* were then much occupied with fabrics in rock crystal, which also gave scope for a special class of miniaturists.

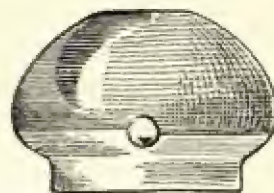
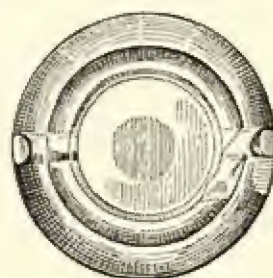


FIG. 902. CRYSTAL POMMEL OF DAGGER.

Shell Cameo with Dagger and Baldric, and Malachite *Tridacna* Shell.

With these other objects was an example of engraving in relief more characteristic of a much later Age. It is in fact a cameo, executed, it would appear in *tridacna* shell, to represent a dagger attached to its belt or

Shell
cameo
from
'Room
of the
Throne'
with dag-
ger and
baldric.

'baldric'. The object, as seen in the section, Fig. 903, *b*, is slightly curved, but its exact application as a personal ornament is not easy to determine. Of the art of carving small cameos in relief in this material a much earlier

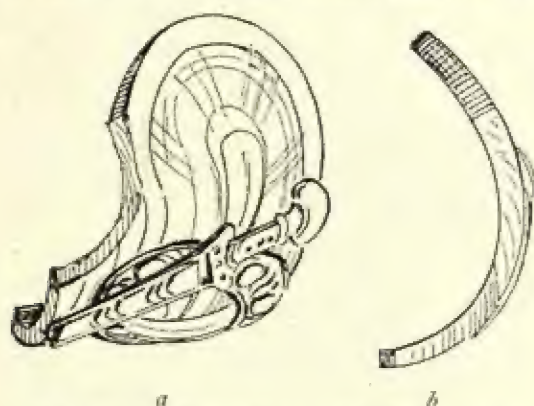


FIG. 903. *a*, SHELL CAMEO ($\frac{1}{2}$); *b*, SECTION.

specimen that had formed part of an inlaid design—perhaps from the primitive *tholos* tomb of Hagios Onuphrios—portraying part of a bearded head, has already been reproduced.¹ The belt is here decorated with disks showing double connexions.

of which the 'horned' type grew. The hilt-plate of the dagger

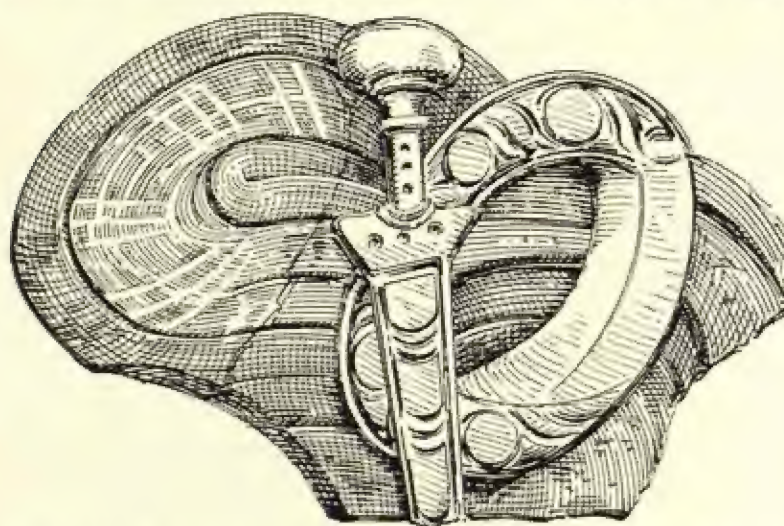


FIG. 904. DEVELOPMENT OF CAMEO SHOWING DAGGER AND BELT ($\frac{2}{3}$).

others arranged vertically above answer to Shaft Grave types of Mycenae.² From the archaeological point of view it is of interest to observe that the

¹ *P. of M.*, ii, Pt. I, p. 46, Fig. 21, *a*, *b*.

² An example consisting of a single curve in relief already occurs on the gold-plated hilt of the dagger from the Fifth Shaft Grave at

Mycenae with inlaid lilies, of a type belonging to the close of M.M. III.

³ E.g., Karo, *Schachtgräber von Mykenai*, *Atlas*, Pl. LXXIV, No. 435.

with those of

disks linked by diagonal bands seen here on the dagger belt answer to a motive of M. M. I a, and indeed of E. M. III tradition.¹

A conventionalized and reduced version of the *Tridacna* shell itself



FIG. 905. FRAGMENT OF MINIATURE *TRIDACNA* SHELL, CARVED IN MALACHITE. ($\frac{1}{2}$).

may be recognized in the fragments, Fig. 905, here illustrated, from the same deposit. The material is fine malachite with brilliant bluish green veining, a material which, in one form or another, is to be found in copper-bearing regions like Cyprus. That this stone, the ancient *chrysocola*, was of very early introduction into Crete we have proof in the discovery, referred to early in this work, of a stud of this material from the Middle Neolithic stratum beneath the Central Court at Knossos.² Pounded malachite was used for personal decoration by the pre-dynastic race in Egypt, and its traces recur on their slate palettes, but though palettes similar to some of the primitive Nilotic were found in the early Vaulted Tombs of Mesara,³ no trace of the pigment used had been preserved. In the well-known 'Shield Fresco' of Tiryns, so closely dependent on that of Knossos, pounded malachite first appears as a colouring material of the Minoan painter.⁴

Tridacna
shell in
Mala-
chite.

¹ Cf., for instance, *P. of M.*, i, p. 112, Fig. 79, and p. 113, Fig. 80 a, 10 (Gournià, E.M. III), and *ib.* ii, Pt. I, p. 186, Fig. 97, b (Pachyammos, M. M. I a).

² *P. of M.*, i, p. 55, and Fig. 15 b.

³ As, for instance, Xanthudides, *Vaulted*

Tombs of Mesara, Pl. XXI, and pp. 15, 16, and cf. *P. of M.*, ii, Pt. I, pp. 44, 45, and Fig. 20, a, b.

⁴ See above, *P. of M.*, iii, p. 305, and Noel Heaton in Rodenwaldt, *Tiryns*, ii, p. 226.

Locus with Remains of Egyptian Faience, Lapis Lazuli, &c.

Niche in
wall with
further
relics.

What must be regarded as an integral part of the same Treasure, which in this case had fallen more directly from the floor above, was discovered in a small niche or *loculus* made in the wall to the right of the Throne, in the North-East corner of the Room, just above the gypsum bench. Worked into this were some pieces of brilliant blue and green faience, or *porcelaine tendre*, from its style certainly of Egyptian fabric, some further pieces of rock crystal for inlaying and others of *lapis lazuli*, together with fragments of a large vessel of amethystine spar, with traces of carving, that showed that it had belonged to some larger *objet d'art*. With these was also found a good deal of gold-foil, the segregated position in which this part of the deposit lay having preserved it from the treasure-seekers who seem to have overhauled the relics in the Lustral Basin.

Relics all
of M. M.
III *b* date.

It will be seen that this whole deposit, including objects in a variety of choice materials and of singular beauty—more than one of them unique in the history of Art—is inseparable in many of its characteristic forms from a group of hoards brought to light in both Palace sections and belonging to the Great Transitional epoch of the close of M. M. III *b*. Taking the Later Palace in the broadest sense of the word as having owed its essential features to the Great Rebuilding at the close of M. M. III, we may set these surviving relics of the minor arts beside the high reliefs of the Northern Portico and the Great East Hall as representing a direct inheritance from the Great Age. If, as it seems, these were stored in this more recent structure either in the chamber immediately above that of the Throne, or, as might seem more probable, in some adjoining Treasury repository, we are bound to conclude that, down to the last days of the Palace, they were still available for the delectation or use of the Priest-kings of what has been here regarded as a later dynasty.

As the remains—of which only the merest fraction have survived to us—included, not to speak of inlaid caskets, more than one of the magnificent ivory and gold gaming-tables at that time in vogue, with their crystal and faience incrustations, besides what may have been a panoply of royal arms, they must together have occupied considerable space. The present adaptation of the *loggia*, from which they seem to have been precipitated, for the exhibition of replicas of frescoes and of other artistic relics belonging to the building may itself find some warrant in Minoan precedent.

Ritual Aspect of the 'Room of the Throne' and its Ante-chamber.

The 'Room of the Throne' that forms the centre of the Late Palace section above described must by no means be regarded as the Throne Room proper of the royal residency as a whole. The throne of the Lord of Knossos—at least on his secular side—has, with great probability, to be sought against the North wall of the inner compartment of the 'Hall of the Double Axes', in the outer section of which remains of a wooden seat of honour—provided in this case with a canopy—were actually preserved.¹

Throne of State to be sought in Domestic Quarter.

The State chamber with which we are concerned in this place, together with its ante-room, was throughout designed to serve a religious purpose. The arrangement, visible in both sections, of a high central seat of honour flanked and confronted by lower benches, is itself sufficiently significant. The benches round, which seem to have been occupied by members of some kind of Consistory, afforded sitting-room in the 'Throne Chamber' itself for sixteen members of this, besides the high personage enthroned. In the Ante-chamber there was room, in addition to the presiding dignitary on the seat of honour, for twelve persons, seven of these on the bench along the South Wall. Thus, including the Priest-king and his Vicegerent, the total number accommodated in both sections would have been thirty.² The large opening between the two spaces made it possible to have a joint sitting, as if in a single chamber.

Ritual aspects of 'Room of the Throne', a Consistory Chamber.

Initial Ceremonies in Ante-room: Purple Gypsum Font.

As to the character of the ritual itself the Ante-chamber must first be considered, since we should here seek its preliminary stage.

In this case, happily, what seems to be a real clue is the fact that, in the passage-way leading West from the North corner entrance of the

Ante-room—scene of initial rites.

Purple Gypsum font.

¹ See *P. of M.*, iii, p. 333 seqq., and pp. 336, 337, Figs. 223, 224.

² In the Introductory Section of this Work an analogy was suggested between the inner ritual chamber at Knossos, distinguished by its throne and benches and with an ante-room beyond, and the 'Hall of Initiation' of the Sanctuary of Mên Askaēnos and a Mother Goddess, described as Dēmēter, near the Pisidian Antioch. See *P. of M.*, i, pp. 4, 5, and cf. the Plan given by Sir W. M. Ramsay in *B. S. A.*, xviii, p. 41, Fig. 1. Here, too,

were throne and bench, with another rock-cut bench behind. Together with these, moreover, were remains of an enclosure with a water channel in front, and there was also a later *Pronaos* with a shallow basin. But the parallelism at most is of a quite general nature and the Phrygian Mysteries with which we are asked to associate its Mên Sanctuary have no necessary connexion with the South Cilician and South-Eastern Anatolian religious traditions, such as have principally affected Minoan Crete.

room—out of its place, and blocking the way—was found a massive basin, about 90 centimetres in diameter and 20 high, of that purple gypsum so much in request for vases in the last Palatial Age. The nearest position



FIG. 906. PURPLE GYPSUM FONT.

in which this conspicuous object could with any probability have originally stood, was on the open space provided by the pavement of the Ante-room (see Plan, Fig. 877, opp. p. 902), and here it was already placed in a central position at the time of the excavation, without any reference to theoretic views as to its ritual significance. Evidently, however, it has the appearance of having been a 'font' for ritual sprinkling.

The discovery of this gypsum 'font' in fact fits on to that of two other specimens found in two basements bordering the North side of this corner of the Central Court.¹ One of these was of alabaster and the other of gypsum, and they were associated with pedestalled lamps of steatite and purple gypsum, including the fine 'lotus' lamp with quatrefoil flutings.² As pointed out above in relation to these finds, there is every reason to suppose that in these cases the associated 'fonts' had stood in connexion with lustral rites.

Holy-
water
sprinkler.

New light has been shed on such lustral functions by the evidence above adduced of Minoan holy-water sprinklers, consisting, seemingly, of a wisp of hair attached to a rod.³ Such an object is seen on a seal-stone (from the Stepped Portico) in the hands of the Snake Goddess as the symbol of her spiritual dominion, the sword in her other hand proclaiming her secular power (Fig. 907).⁴ The 'Young Prince' on the Hagia Triada cup holds the same symbolic objects.⁵ The sprinkler is also seen in relief on a M. M. III *6* sherd.⁶

Attention has already been called⁷ to the remarkable parallel presented by the *aspergillum* of the Roman Pontifices such as we see it

¹ See *P. of M.*, iii, p. 25 seqq.

² *Ib.*, p. 27, Fig. 14 a.

³ See *P. of M.*, ii, Pt. II, p. 792 seqq., and Figs. 517, 518.

⁴ *Ib.*, p. 793, Fig. 517.

⁵ *Ib.*, p. 791, Fig. 516.

⁶ *Ib.*, p. 795, Fig. 519.

⁷ See *Ib.*, pp. 793, 794.

among their principal emblems on the denarius of Julius Caesar, here reproduced. It gains importance from the ladle placed beside it. This, as shown below, may also have played a part in the Minoan ritual.



FIG. 907. SNAKE GODDESS HOLDING SWORD AND RITUAL SPRINKLER: ON 'FLAT CYLINDER', KNOSSOS. ($\frac{2}{3}$)



FIG. 908. REVERSE OF *DENARIUS* OF CAESAR (58-49 B.C.) SHOWING THE PONTIFICAL EMBLEMS—LADLE (*SIMFULUM*), HOLY-WATER SPRINKLER (*ASPERGILLUM*), AXE, AND PEAKED HELMET (*APEX*).

Lustral Basin of 'Room of the Throne' used for Anointing Ceremonies.

If the Ante-chamber was the scene of an initiatory purification through the sprinkling of holy water, there is direct evidence that Lustral Basins like that of the adjoining 'Room of the Throne' were used for the anointing of votaries with oil, or some unguent of which it formed the principal part. Numerous clay flasks of thick fabric and somewhat roughly made, for the holding, it is reasonable to suppose, of such unguents, occurred in several of these sunken areas, where they had been thrown away after use. The largest specimens, one of which has been already illustrated,¹ were found in the most spacious of all the known Basins of this class, that associated with the 'Initiatory Area' to the North-West of the Palace. Remains of somewhat smaller vessels of the same kind also came to light in the Lustral Basin in the S.E. Quarter of the building. Others, of still more diminutive size and with single handles of a rudimentary form, lay on or near the floor of the similar area in the South House—an example of which is here reproduced in Fig. 909. Its date is probably L. M. I a.

Lustral basin—for anointing.

Clay oil flasks.

No actual specimen of unguent vessels of this kind was forthcoming from the Lustral Basin of the 'Room of the Throne', but we are justified in concluding that the same usage prevailed in this as in the other cases mentioned. These little clay flasks may well have been filled either by the

¹ *P. of M.*, i, p. 411, Fig. 295.

summary expedient of dipping them into open superficial oil-vats of the Magazines or by ladling oil out of the 'alabastra', that formed intermediate receptacles of the liquid used.

Flat
alabastra
in course
of filling.

Of the large flat alabaster vases, universally believed to have held the oil used for anointing, there was at any rate no dearth in the area round. The narrow passage, later blocked at its Southern end, between the West wall of the Lustral Basin and that beyond, was used as a place of storage for these vessels, one of which was found *in situ* just to left of the entrance here to the 'Inner Shrine', while, beyond this, marks were visible

on the pavement where five more had habitually stood (see Plan, Fig. 877). These five had, in fact, been transferred to the floor of the room near its entrance opening, for the purpose of refilling.

Three of these are reproduced in Fig. 910; their general appearance, as seen from above, recalling the huge unfinished 'amphora' from the 'Sculptor's Workshop'.¹ Here we see smaller, lidded orifices, while, on the shoulders, perforated shield-like bosses take the place of handles. Clay prototypes of these squat alabastra—descendants of a baggy Egyptian Middle Empire type—in that case handle-less—are already found with regular handles in the later stage of L. M. I.² The decoration in the case of the present examples was exceptionally well executed—the foliate borders of the larger specimen in Fig. 910 recalling the best work of the 'Palace Style' vase-painters³ and the fine bronze basins that preceded them.⁴

For the extraction of the oil from these vessels (so formed that pour-

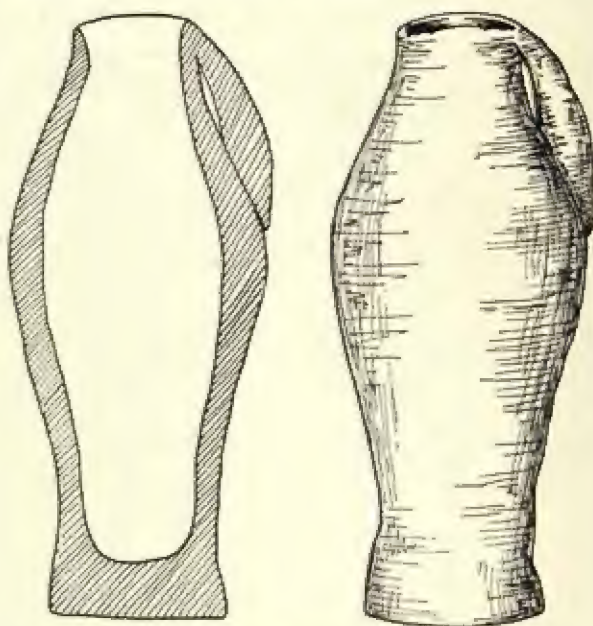


FIG. 909. CLAY OIL-FLASK FROM 'LUSTRAL BASIN' (S. HOUSE). (3)

Ladles
for ex-
tracting
oil.

¹ See above, pp. 898, 899, Figs. 875 a, b.

² See for instance above, p. 272, Fig. 202. The curious specimen from Sedment, p. 268, Fig. 198 a, b above, also represents an ante-

cedent stage of this alabastron type.

³ Compare, for instance, *P. of M.*, ii, 11, pp. 639, 640, Figs. 403, 406.

⁴ See *P. of M.*, ii, Pt. II, p. 639, Figs. 403, 404.

ing out was impossible) ladles of a very modern type were in use, of which a silver example, found with an 'alabastron' of higher form in the Vapheio



FIG. 910. SPECIMENS OF THE 'ALABASTRA' SET ON THE PAVEMENT OF 'ROOM OF THE THRONE' FOR FILLING WITH OIL FROM *PITHOS* SET ON ITS SIDE BESIDE THEM.

Tomb,¹ is here given in Fig. 911. In form it resembles the clay ladle or *simpulum* of the Roman Pontifices which, as shown in Fig. 908, took its place beside the *aspergillum* or lustral sprinkler illustrated above, though that seems rather to have been used for ladling out wine for libations. A ladle appears, with a set of metal vessels, on a tablet of Class B.²

¹ Tsountas, 'Εφ. 'Αρχ., 1899, Pl. VII, Fig. 17.

² See above, p. 730, Fig. 713.

It seems possible that an inlaid casket, remains of which were brought to light on the floor of the chamber, not far from the 'alabastra' temporarily set there, may have served to contain these.

Remains
of casket
inlaid
with
faïence
disks with
segmental
'rosettes'.

Together with carbonized wood there were found—in two main groups in the space bordering on the bench of the balustrade opposite the throne, as roughly indicated in the plan, Fig. 877—a number of faïence disks for inlaying. A series of these, moreover, lay on their faces, showing that they belonged to some small case that had fallen downwards. There is every reason indeed to conclude from the position of these that it had been thrown on to the pavement from the adjoining gypsum bench by the balustrade.

The material of the roundels was of a purplish brown hue, showing on the face four, or in some cases three, segments of *vesica piscis* shape, enclosing a four-spurred central design of pale green, with narrow horizontal bars of a darker tint. On the lower side of the inlays were, as in other similar cases, signs and pellets indicative of numeration. A specimen of one of the roundels is given in Fig. 912 *a, b*. For the signs see Fig. 913.

Early
appear-
ance of
these in
Crete.

In the First Part of this Volume fresh proofs have been given of the very early date at which this disk ornament with segmental rosettes makes its appearance in Minoan Art.¹ Fragmentary faïence inlays are already seen in E. M. II, and 'rosettes' of this kind are already repeated as white designs on dark ware of the last Early Minoan Period, long before there is any record of them in the land of the Pharaohs.² Actual shell inlays, forming disks with a kind of quatrefoil or cruciform pattern, already appear indeed in the 'Vat Room' Deposit of M. M. I *a* date.³ Painted rosettes of this kind, however, appear in Egypt (as a ceiling ornament) under the New Empire and Egyptian inlays of this kind form, later on, a regular feature of XVIIIth Dynasty decoration. Technically—though not artistically—the Egyptian faïence fabrics were better executed than the Cretan, and the faïence roundels, from Tell-el-Amarna, with

Late
Egyptian
examples
com-
pared.

¹ See above Pt. I, p. 92.

² It is of course, well established that the practice of inlaying—at times with pure glass—goes back in the Nile Valley into the late prehistoric period and continued to be rife under the early Dynasties. The general in-

debtedness of early Crete in the matter of such inlaid work and with regard to the origins of faïence and *porcelaine tendre* is not in question.

³ *P. of M.*, i, p. 169, Fig. 120.

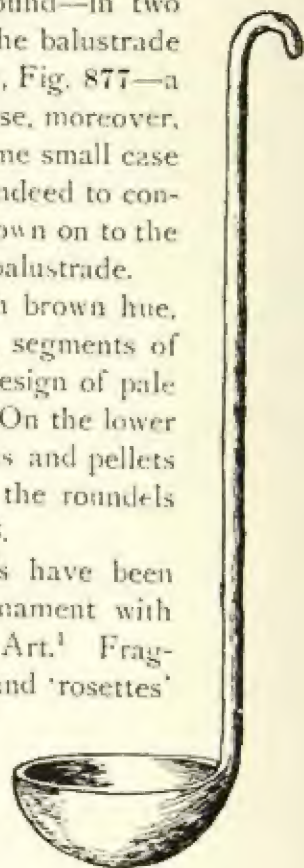


FIG. 911. SILVER LADLE FOR OINTMENT (FROM VAPHIO TOMB).

variations of the pattern showing a central rosette, though belonging to a somewhat later date, are much better executed. The still later specimens from the Pavilion of Rameses II at Tell-el-Yahûdiyeh have much more in common and present, besides hieroglyphic forms,

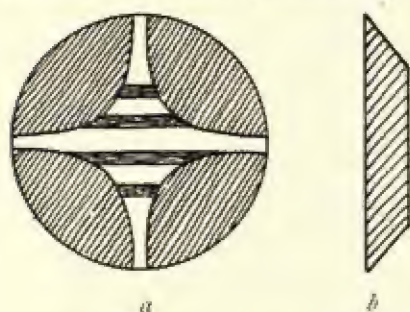


FIG. 912. *a*, FAÏENCE PLAQUE FOR INLAYING FROM 'ROOM OF THE THRONE'; *b*, SECTION.

linear signs on the back such as X, Λ \mathbb{A} \mathbb{M} , together with upright strokes signifying units. Nine out of twelve linear signs found there correspond with those on one or other class of Cretan inlays, a sufficient indication of their source. At

Tell-el-Amarna the marks are practically confined to the character T.

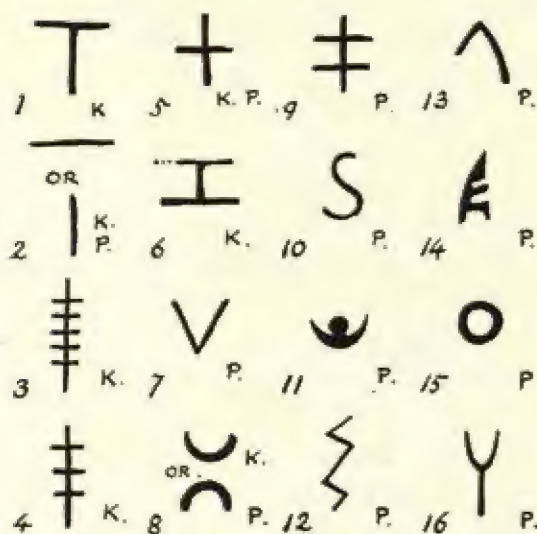


FIG. 913. INCISED SIGNS ON INLAYS FROM 'ROOM OF THE THRONE' AND PHAESTOS.

On the faïence disks from Knossos the signs and numbers were made when the material was still soft. Several of the 'Craftsmen's' signs are the same as those used for faïence plaques of other forms at Phaestos.¹ A comparative Table of the signs on such paste inlays from the two sites is given in Fig. 913. A few are identical with those on the bone fish from the 'Drain Shaft Deposit' already described,² and almost without exception they show the same alphabetiform

Alpha-
betiform
signs on
Knossian
disks.

tendency. The following examples of numeration are associated with such signs on the Throne Room disks, T $\bullet \bullet \bullet$ | $\circ \bullet \bullet \bullet$ + $\bullet \bullet \bullet \bullet$ (partly below), $\cup \equiv$ (below).

¹ See L. Pernier, *Scavi della Missione italiana a Phaestos*, 1900-1, p. 92 seqq. (*Mon.*

Ant., xii, 1902), and see pp. 93, 94, Fig. 28 *a*, *b*.

² *P. of M.*, iii, p. 406.

The Closing Scene.

Sudden
interrup-
tion of
prepara-
tory filling
of *alabastra*.

It would seem that preparations were on foot for some anointing ceremony in the 'Lustral Basin' in which the *Papa Rê* himself may well have been called on to play a leading part. For this it had evidently been found necessary to refill most of the alabaster oil vessels, usually placed, as the marks of their bases on the pavement show, along the wall to the left of the entrance to the Inner Shrine, where there was a convenient nook for this purpose. Five out of six of these had been removed, as we have seen, from their place of storage and set down irregularly in the area in the entrance opening of the 'Room of the Throne'. One of the large oil *pithoi* from the Magazines, the contents of which were conveniently low, had been carried in here and laid down on its side so that the oil could be easily ladled into the *alabastra*.

Com-
parison
with 'am-
phoras'
left un-
finished
in work-
shop.

But this initial task was never destined to reach its fulfilment. Beneath a covering mass of earth and rubble the clay oil-jar was brought to light as it had been laid, though in a much crushed condition, with the ritual vases on the pavement beside it as they had been set for the filling. What happened here seems exactly to have resembled what, as we have seen, took place in the 'Sculptor's Workshop' of the Quarter opposite, where the alabaster and limestone 'amphoras' were left unfinished on the floor.

Symp-
toms of
fresh
Earth-
quake
Shock.

The sudden breaking off of tasks begun—so conspicuous in the first case—surely points to an instantaneous cause. The more general scare occasioned by an enemy approaching the walls may be thought a less probable cause of a violent interruption such as that of which the signs have been here preserved for us, than another of those dread shocks that had again and again caused a break in the Palace history. The violent projection of the inlaid casket—that had been seemingly placed on the neighbouring bench—face downwards on to the pavement—itself fits in well with such a seismic cause.

When we call to mind the evidence that has by now accumulated of past experiences of this kind in this 'land of Earthquakes', the last catastrophe of Knossos seems best accounted for in this way. It must indeed be recognized that the exceptionally brilliant position at that time occupied by the Palace lords, and the armaments of which we have the records—not to speak of the generally depressed conditions elsewhere—makes a hostile attack the less probable.

Ensuing Conflagration: Significant Smoke Marks on West Façade.

If, however, first and foremost, we have to deal with an Earthquake shock, there are direct indications that the actual overthrow (which could



FIG. 914. SECTION OF WEST FAÇADE WALL OF PALACE SHOWING SMOKE STAINS ON ITS GYPSUM BLOCKS, ILLUSTRATING FORCE OF GALE.

hardly have been so severe as some of the foregoing), was greatly aggravated by a widespread conflagration, such as indeed is so often the consequence of seismic destruction.

On the gypsum orthostats of the Western façade of the Palace there can still be discerned what may be regarded as a clear record of such a conflagration, which seems to have attained specially disastrous dimensions owing to a furious wind then blowing. Here, in the Northern Section of the wall the traces of smoke are visible for a space of several metres, starting from a lighter rectangle that evidently represents the point where a large square rafter had fallen, blazing, from the upper story. (See Fig. 914.)

The smoke stains here show that a wind of considerable velocity must have been then blowing, since in a space of nearly five metres it rose little more than 50 centimetres. From its direction it was clearly the *Notios* or South-West wind, striking the wall across the open space of the West Court. This wind, the *Gharbis* of our Moslem workmen,¹ blowing—often for three days at a time—in an almost continuous torrent, was a constant obstacle to excavation in the Spring months, attaining its maximum force in March, and often stopping all work with blinding dust clouds. The whole sky took a lurid hue, caused by the Sahara sand carried over by it, which at times even left a thin reddish deposit on house-tops and terraces, and on the Palace site was blended with denser dust clouds from our own earth dumps.

Evidences of conflagration and S.W. gale.

¹ From its Westerly touch (Arab. *Gharb*); Tripoli was the 'West' land.

Probable
date of
Cata-
strophe in
March.

The season of the *Notios'* greatest force may enable us with some probability to assign the final catastrophe of the building to the month of March, though the year can only more approximately be given as round about 1400 B.C.

Sequel to the Catastrophe of the Palace.

But the immediate importance of this huge disaster as regards its results on current history and the general course of Minoan culture—great as it was—must not be exaggerated.

When, about the turning-point of the Fifteenth and Sixteenth Centuries before our Era—marking the final stage of a considerable catastrophe of the building—a trail of flame and smoke was swept Aegeanwards by the prevailing gale, it by no means portended the final ruin of all that the Great Palace had stood for. Old Civilizations die hard. A falling off compared with the golden days of the great 'Transitional Age' there certainly was already, but the disaster now suffered was far from heralding the Reign of Chaos. A deepening of the twilight there may have been, but 'universal darkness' was still far off.

No
sudden
break
in the
culture
itself.

There is no reason to suppose that the overthrow that preceded the fire—to which, once again, it seems best to assign a seismic cause—was itself of an exceptional character, or that, indeed, it approached in magnitude that which, for instance, had put an end to the building in its Middle Minoan stage. The evidence of neighbouring cemeteries like that of Zafer Papoura has already been noted as showing that, even locally, the general course of civilization was not sensibly interrupted. The conflagration itself does not seem to have barely extended to the basement stories, where the carbonization of the columns was in many cases the result of gradual chemical action rather than actual burning. In such areas as, in the Domestic Quarter, the lower part of the Hall of the Colonnades, and the Grand Staircase, and in sections of the great 'Megarons' there, as within the Little Palace, they seem long to have preserved their supporting function. In the West Quarter, again, the shafts of the columns that flanked the 'Lustral Basin' opposite the throne were found largely existent, though here as elsewhere reduced to charcoal, which broke up in the course of excavation.

Cumula-
tive effect
of seismic
menace.

But although the ruin was not itself certainly greater than that of former overthrows from which the energetic spirit of the Palace lords had yet emerged triumphant in successive restorations, the cumulative effect of this fresh disaster must yet be reckoned with. The Powers of the Under-

world had proved unappeasable on the site of Knossos. The soothsayers of the House of Minos—whose procedure seems so strikingly to have corresponded with that followed by the Etruscan *haruspices* of later days¹—might even at long last have convinced the Priest-king himself that there existed a religious ban on any further attempt to renew the building on the ancient site.

Site deserted by Palace Lords.

Nay more, as far as the by now fairly extensive explorations of the neighbouring district go, there is no indication of a fresh Residency of the Priest-kings having been erected anywhere in the neighbourhood of Knossos.

Certain indications, indeed, make it quite conceivable that the centre of what at this time must have been a widespread Knossian domination may now have been transferred to the Mainland side. The occurrence of 'Palace Style' vases in the Argolid, including Mycenae, has already suggested the conclusion that in the period preceding the great Catastrophe the lords of Knossos had gained a partial dominion on that side. It would seem, indeed, that at this time Knossos, owing to its insular site, may have escaped certain shocks due to human agencies, involving at least a temporary setback in the more exposed Mainland regions. Even in its decline, under its highly centralized bureaucratic régime, it still seems to have originated a living though somewhat confined and artificial style such as we see in the Griffin and Octopus frescoes, not to speak of the masterpieces of ceramic and other minor Arts. Knossos indeed was now supplying the models for the Mainland Minoan Centres.

Probable transference of Seat of Government to Mainland—perhaps, Mycenae.

At Mycenae itself we have the most cogent evidence that the Palace there was redecorated at this time in a purely Knossian style. The 'Shield Fresco' of Knossos—largely even with the same colour scheme—was transferred on a smaller scale to Tiryns, and the gift-holding votaries on the walls of the House of Kadmos at Thebes reflect the earlier models supplied by the 'Procession Fresco'. Even more conclusive is the appearance at this date, as demonstrated in the course of this Volume, of the later Script B of Knossos—at times we may say, even its 'Court hand'—at all these Mainland sites during the epoch that immediately succeeded the fall of the Great Palace. *Pari passu*, moreover, with the diffusion of its developed linear script, a ceramic invasion from the same quarter makes itself everywhere apparent. As shown above, what was fundamentally a late outgrowth of the 'Palace Style' plays the leading part in cutting short the degenerate survival of the fine L. M. I *b*, above described as 'L. M. I *c*', and

Knossian influences now visible at Mycenae, &c.

Diffusion of Late Palace script to Mainland sites.

Knossian impulse moulds common 'Mycenaean' ceramic style.

¹ See above, pp. 572, 573, and Fig. 550.

substituting for it a common L. M. III fabric which took much the same shape throughout the Minoan World.

Survival
of local
Minoan
tradition
at
Knossos
itself.

Apart from these manifold proofs of the survival and extension of Knossian influence beyond the Aegean Sea in the era immediately succeeding the final catastrophe of the Palace as a Palace, a series of remarkable developments of exploration in its near neighbourhood shows that the historic traditions, at least, of the House of Minos were religiously preserved on the site itself. These developments, beginning with the finding of the royal signet-ring, leading, through it, to the discovery of the Temple Tomb of the Priest-kings, and finally revealing the survival of a memorial cult at a time when the Tomb itself had gone out of use, together constitute a fitting Epilogue to the Palace story.



FIG. 914 *bis*. YOUTHFUL PRINCE OR PRIEST-KING OF THE LAST DYNASTIC PERIOD ATTIRED IN LONG ROBE OF ORIENTALIZING FASHION AND HOLDING A SINGLE-EDGED SYRO-EGYPTIAN AXE: HAEMATITE BEAD-SEAL (FROM VATHEIÄ, E. OF KNOSSOS: *cf.* PP. 413, 414, ABOVE). A SIMILAR PERSONAGE APPEARS ON A SEAL FROM THE 'THRONE ROOM' AREA.

§ 117. EPILOGUE: PART I. THE ROYAL SIGNET-RING.

Discovery of the Royal Signet-ring; Beaded gold hoop resembling that of 'Ring of Nestor'; Parallel arrangement of designs—three successive scenes; 'The Ring of Minos'; Subject, the migration of Goddess to new abode overseas; Sacred Tree feature of both Sanctuaries; Goddess steering vessel across arm of sea; Prow in shape of hippocamp; Parallel scenes of departure overseas; Nude female ministrant of first shrine—remarkable pose and action; Reticulated convention of sea-waves; Goddess reposing on these in Palace Sealing; The Minoan prototype of Hagia Pelagia.

Discovery of 'Ring of Minos'.

SOUTH of the Palace, about a kilometre from the 'Caravanserai' on the line of the Great South Road, where the hills on the West side draw nearer the course of the old Kairatos stream, there opens, just above the modern highway, a small rock-girt glen. Here, quite recently, a boy, bringing up his father's midday meal, noticed a bright object on the tilled earth beside a vine, which turned out to be a massive gold signet-ring.¹ Hearing of the find, it was possible for me, somewhat later, not only to examine the object, but to obtain, thanks to Monsieur Gilliéron's skill, an exact replica and enlarged drawings of the ring and its intaglio design (see Fig. 917, and cf. Plate, opp. p. 949).

Discovery
of Royal
Signet-
ring.

The ring was of solid gold, weighing c. 27 grammes, and with a beaded hoop corresponding in every detail with that of the 'Ring of Nestor' from Old Pylos (Kakovatos), described in the Third Volume of this Work.² From the comparative representations (Fig. 915, A and B) it will be seen that, apart from the intaglios, both rings are practically identical from the point of view of manufacture. The hoop of each shows a similar section, with four small circlets of granulation and larger globules round

Beaded
gold hoop
identical
with
'Ring of
Nestor'.

¹ The ring was purchased from the finder's father by a local priest, unfortunately of unbalanced mind, and no exact account of its whereabouts is at present obtainable. His favourite answer to inquirers was that he had given it to his wife, who had buried it and forgotten where! In any case it was worth 'twenty million drachmas'. This, indeed, in

an oblique manner, is to 'lay up treasure' for the next World according to Minoan example as practised by the original priestly and royal owner of the ring.

² P. 145 seqq., and cf. A. E., *The Ring of Nestor*, &c., *J. H. S.*, xlv, and separately, Macmillans, 1925.

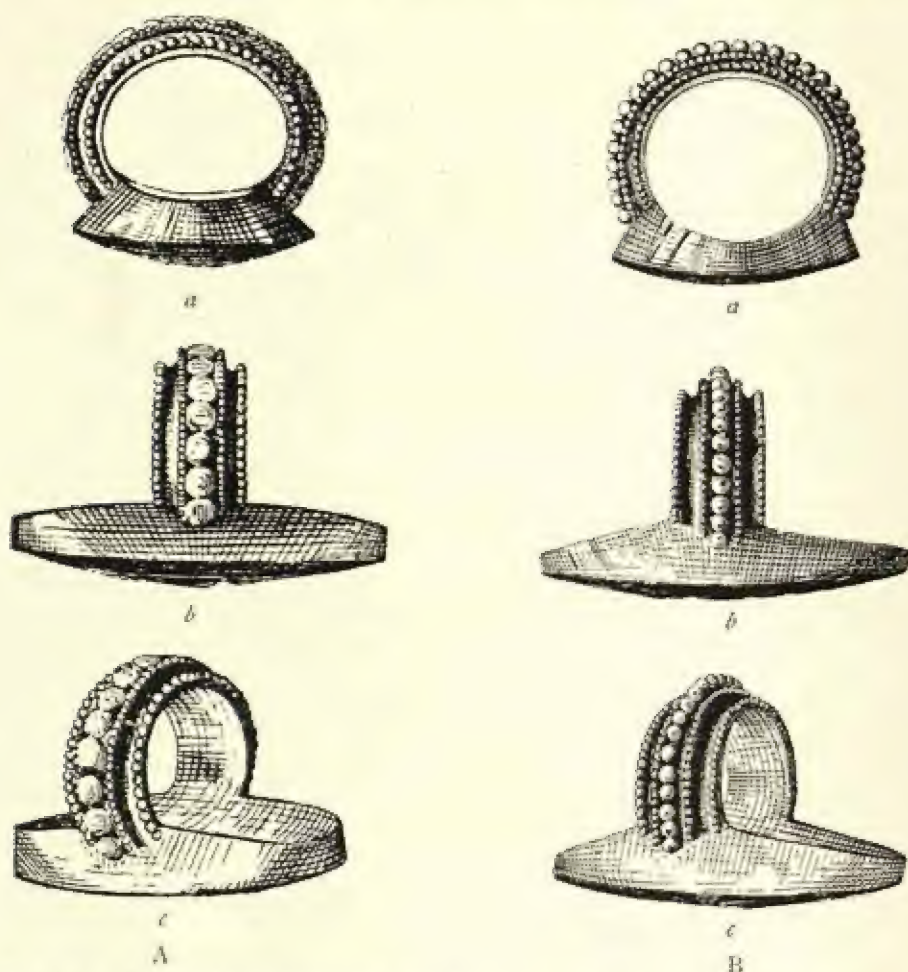


FIG. 915. COMPARATIVE VIEW OF GOLD SIGNET-RINGS: A *a-c*, 'RING OF NESTOR'; B *a-c*, 'RING OF MINOS'. SLIGHTLY ENLARGED (A $\frac{3}{2}$, B $\frac{2}{3}$).

the middle.¹ They must, in fact, be regarded as more or less contemporary works, if not by the hand of the same goldsmith.

According to the information of those on the spot, the Pylos ring was found in the larger of the beehive tombs there, previous to its excavation

¹ In the central ridge of the hoop both rings preserve the tradition of the pendant signet from which, as shown above (p. 510, Fig. 454), the Minoan ring-type originated. The beaded decoration is seen in both under its earlier and finer modelled aspect. The moulding of the hoops was altogether decadent

by I. M. III. The globules of A are somewhat larger and have been more flattened out by pressure. The smaller size of the globules on the 'Ring of Minos' (B) and the shallower, though broader intaglio, may mark it as slightly later in date than the other.





a. INTAGLIO DESIGN OF 'RING OF MINOS', FROM CAST (c. 2); b, c, d, e, PHOTOGRAPHIC COPIES OF RING (?).

by Dr. Dörpfeld and his colleagues, which was afterwards naturally pointed out as the 'Tomb of Nestor'. From the earliest pottery with which this sepulchral vault was associated, as well as on other grounds, the signet-ring, conveniently named after him, may be attributed to the L. M. I *a* epoch.¹



FIG. 916. INTAGLIO DESIGN ON
'RING OF NESTOR'.

The remarkable scenes on its bezel—affording our first insight into the Minoan After-World—stand so close in their style of execution to those of the Miniature Frescoes as to have suggested above a re-translation in colours.² The subject is there divided into three scenes, divided by

Parallel features in arrangement of design.

the trunk and branches of a Minoan Yggdrasil or 'Tree of the World'—the first two in the upper zone, the third in the lower compartments. This latter, though interrupted by the trunk, is practically continuous.

The parallelism shown by the arrangement of the design on the Knossian signet is unmistakable. Here, too, as more fully indicated below, we may discern three separate religious scenes, two above, and the other, marked by the passage of the Goddess across the arm of sea, continuous along the whole lower border. In the figures themselves we recognize the same vivacious style, reminiscent of the seated ladies on the Grand Stand of the Miniature Fresco. The two great signet-rings are not only, as pointed out above, of practically identical fabric so far as their form and beading is concerned, but they both illustrate the system of consecutive scenes—four in one and three in the other—woven together into a single design. On the other hand, the 'Ring of Nestor' exhibits more numerous and more microscopic figures, human and divine. The cutting is proportionally deeper. The ring before us offers in places a broader intaglio, and is possibly of slightly later date. At the same time it equally belongs to the same school of engraving, and must equally be placed within the limits of the same L. M. I phase,³ with its fine earlier traditions, to which, from

The 'Ring of Minos'.

¹ Cf. *P. of M.*, iii, p. 146.

² See *ib.*, Coloured Plate XX A.

³ Dr. K. W. Majewski, who has given an account of the 'Ring of Minos' in *Eos* (xxxiii; Krakow, 1930-31), comes to a similar conclusion. He observes (p. 8) 'die kompositionellen und plastischen Probleme dieses

Ringes kunstvoll und in der Manier der besten kretischen Künstler gelöst sind. Auf Grund dieser stilistischen Kriterien und zahlreicher Themaanalogien können wir annehmen dass dieser Ring aus der L. M. I Epoche stamme.'

the associations in which it was found, the 'Ring of Nestor' must be ascribed. In other words, it may be referred to a date round about the middle of the Sixteenth Century B.C.

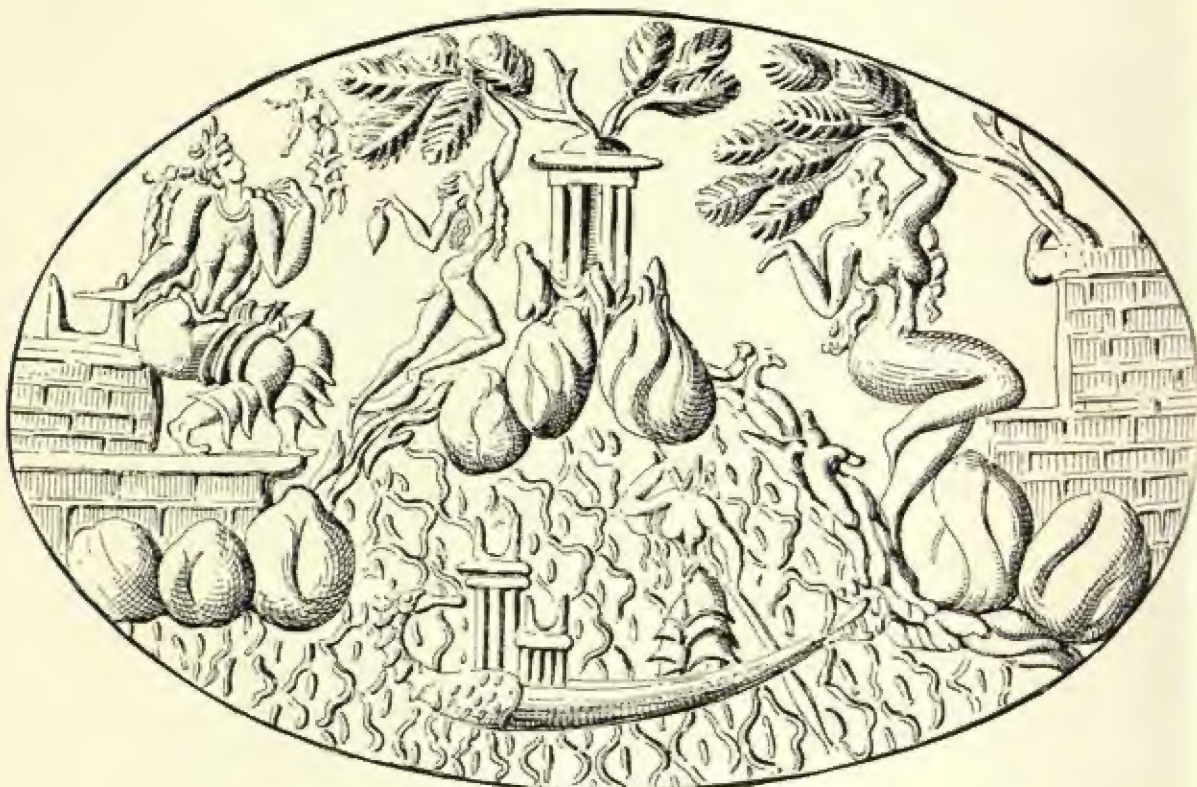


FIG. 917. INTAGLIO DESIGN ON 'RING OF MINOS': ENLARGED ($\times \frac{3}{2}$).

From its parallelism with the latter, and the direct relation, exposed below, of this more recently discovered signet with the 'Temple Tomb' of the last Priest-kings of Knossos, it may be thought to have a legitimate claim to be termed, as here, the 'Ring of Minos'.

Subject of the Signet Design.

Subject of
design,
migration
of God-
dess to
new
abode
overseas.

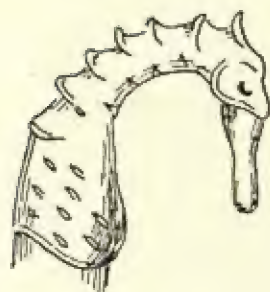
The subject on the bezel of the ring may be briefly described as the passage of the Goddess from one rock sanctuary to another across an intervening stretch of sea. The design is shown in Suppl. Pl. LXV and M. Gilliéron's drawing, Fig. 917—enlarged somewhat over 4 diameters. In the intaglio itself the three principal scenes begin from left to right.

In the first of these, in the order here proposed, we see a somewhat massive, isodomic structure, with an upper walling above its terrace, containing a sacred tree, also a central feature in the later sanctuary to the left. On the projecting ledge of this sanctuary rests a naked female figure—a minister of the divinity—pulling down a branch as if to offer its fruit to the Goddess, who, however, is already embarked below. Two massive boulders support it.

Sacred Tree features of both sanctuaries.



a



b

FIG. 918. a, MEDITERRANEAN HIPPOCAMP (*HIPPOCAMPUS BREVIROSTRIS*); b, PROW OF GODDESS'S BARK ON 'RING OF MINOS'; ENLARGED. FROM GIL-LIÉRON'S DRAWING.

In the next scene the Goddess steers her bark across the waves—here decoratively rendered by a reticulated pattern—towards the shore beyond, indicated by three more conventional boulders. Above these, again, is another isodomic structure supporting an altar with sacral horns. Against this what we may recognize as the same Goddess arrived in her new home sits richly appressed, about to receive refection from a small male attendant who has pulled down a branch of another sacred tree and tenders a flask containing its juice. Simultaneously with this sacramental act the divinity of the seated personage is reinforced, as it were, by a small descending figure of the same sex. The sacred tree itself stands within a pillar shrine on the adjoining rocky knoll, which, as appears from the comparative example given below (Fig. 919), may be actually identified with the taller of the two shrines transported in the bark below. The advent of the Goddess is thus completed by that of her double sanctuary and altar and of the sacred tree.

Goddess steering vessel across arm of sea.

The vessel that the Goddess steers the waves bears on its fore-part a higher and a lower pillar altar surmounted by the sacral horns. The end of the stern branches out in a fish-tailed manner—a very ancient tradition in figures of Minoan craft—while the prow and whole fore-part of the vessel take the form of the head and the stickle-backed fore-part of the body of some kind of monster, clearly based on the little 'sea-horse' (*Hippocampus brevirostris*) common in Mediterranean waters (Fig. 918, a, b). Both this feature and the whole scene find an interesting parallel on a gold signet from a grave excavated by Seager on the islet of Mochlos, in which case the

Prow in shape of Hippocamp.

Goddess, seated with her face towards a similar fish-tailed stern, raises her hand as if saluting the sanctuary from which she departs (Fig. 919).¹



FIG. 919. GOLD SIGNET-RING FROM MOCHLOS.



FIG. 920. SMALL GOLD SIGNET WITH SKETCHY DESIGN OF GODDESS ON DOG-HEADED VESSEL (?).

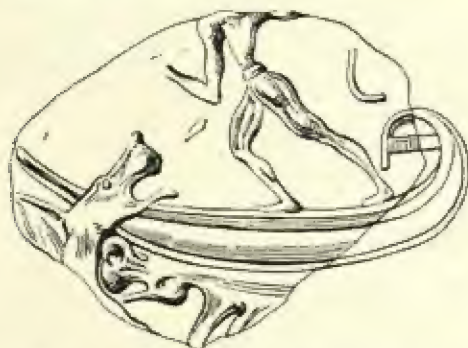


FIG. 921. DOG-HEADED MONSTER, PROTOTYPE OF SKYLLA, ATTACKING BOAT: SEALING FROM 'TEMPLE REPOSITORIES'.

monstrous marine shapes and the little 'sea-horse' points to very early tales of Aegean folk-lore, which indeed had a long later history. The spiky

Behind her, towards the prow of the vessel, is a small double shrine from which rises a sacred tree. The animal's head which forms the prow, as the mane-like appearance at the back of the neck shows, must be now recognized as a derivative version of that of the sea-horse or Hippocampus.²

On a smaller gold signet-ring from Knossos the long-nosed head of the prow and the fish-tailed stern of a vessel again appear, in which the Goddess may be also discerned pulling at an oar (Fig. 920). In this sketchy version the waves of the sea are roughly indicated below, and, perhaps, a rocky shore.

The same sea-monster under a more dog-headed form, recognized as the prototype of Skylla, has already been noted on a seal type from the Temple Repositories, being beaten off by the seaman's oar from the skiff that it is attacking (Fig. 921).³ On the silver 'rhyton', again, from Mycenae, its head emerges from the waves amidst the shipwrecked swimmers.⁴ The connexion established by the signet-ring between these

¹ See *P. of M.*, ii, Pt. I, p. 250, Fig. 147 (from a drawing by Gilliéron, père), and cf. Seager, *Explorations in the Island of Mochlos*, pp. 89, 90, and Fig. 52. My conclusion (*loc. cit.*) that the 'fish-tailed' end represents the prow seems to be less probable in view of the attitude and action of the Goddess in the newly

discovered signet. The scene on the Mochlos ring would also be one of leave-taking and not of arrival.

² Both Mr. Seager and myself had identified it (*loc. cit.*) with a dog's head.

³ Cf. *P. of M.*, i, p. 698, Fig. 520.

⁴ *P. of M.*, iii, p. 96, Fig. 54.

coils of Skylla herself were certainly borrowed from it.¹ Its contributions to the Classical Hippocamp have long been recognized and are well illus-

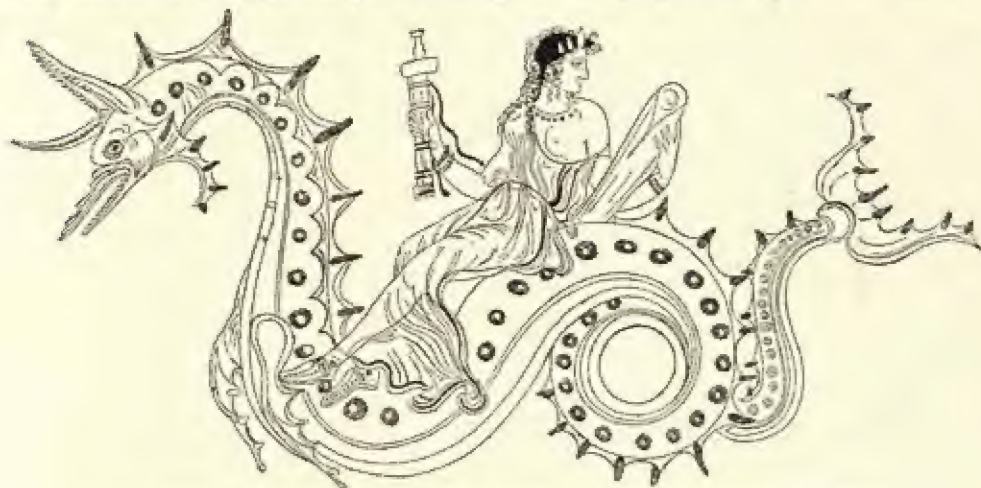


FIG. 922. HIPPOCAMP RIDDEN BY NEREID BEARING ACHILLES' SWORD.

trated by Fig. 922, depicting one ridden by a Nereid.² What is strange is that a marine species, hardly bigger than a large prawn, should have been magnified by popular fancy into a monster—such as to-day haunts Caledonian seas unknown to the little Hippocampus itself.

It certainly was not for nothing that the bark on which the Goddess is seen navigating the waves on these signets should bear the head of a sea-monster, clearly based, as we learn from the 'Ring of Minos', on this 'stickle-backed' marine creature. Like the Greek 'Queen of the Sea',³ Amphitritē—who seems to have taken over something of her mythic being—she, too, is here clearly indicated as Mistress of such sea monsters.

In close relation again to the preceding, though without the Hippocamp prow, is the design on another gold signet-ring found near Candia, Fig. 923,



FIG. 923. GOLD SIGNET-RING FROM CANDIA.

¹ Compare especially the Akragantine type, *B.M. Cat. Greek Coins*, p. 12, No. 61.

² Heydemann, *Nereiden mit den Waffen Achills*, Pl. ii (see, too, B. Sauer, in Roscher *s.v.*).

³ Ἄλως βασιλεύει: Oppian *Halientika*, l. 391.

Already, in the *Odyssey*, Amphitritē appears as in a special manner mistress of sea monsters;
 ἐλφινῆς τε κύρας τε καὶ εἴ ποθι μείζον ἔλθουσιν |
 κῆτος ἢ μυρία βόσκει ἀγνώστου Ἀμφιτρίτης (*Od.* xii. 96, 97).

Parallel
scenes of
departure
overseas.

and very probably from the harbour town of Knossos.¹ Here the Goddess and her tree behind her float in the air above a bark with six rowers and a steersman, its direction being further indicated by three fish, probably dolphins, in the same manner as on the ivory relief of a Greek warship from the Orthia Sanctuary at Sparta.² On the Knossian signet there rises on the shore from which the boat pushes off, a pillar representing a baetylic shrine, before which a male figure—one hand on the wrist of his flounced consort—stands with his arm stretched out to the Goddess above, who responds with a similar farewell gesture. A parallel scene occurs on the gold signet-ring from Tiryns (Fig. 926).³

It would seem that the parallel designs on the above signets must be regarded as variant versions of the scenes of the departure of the Goddess over sea, together with her shrine and sacred tree, while on the 'Ring of Minos' her advent in her new abode is fully illustrated. As already observed, we see before us there three separate scenes, in the first of which the shrine and the sacred tree are depicted on their original site. The possibility is not excluded that the naked female figure that appears on this, pulling down the branch for divine refection, may be another version of the Goddess herself. More probably—by analogy with the boy ministrant of the arrival scene—she should rather be regarded as the handmaiden of the divinity. Her figure, curiously poised with twisted legs on the edge of the sanctuary platform, and with the long tresses falling to her hips, is in itself of considerable interest from the artistic point of view (Fig. 924). On the other hand, the complete nudity, coupled at the same



FIG. 924. NUDE FEMALE FIGURE RESTING ON EDGE OF ALTAR-BASE, PULLING DOWN BRANCH. (EXCERPT FROM MONSIEUR E. GILLIÉRON'S DRAWING.)

Nude
female
ministrant of
first

¹ See, too, *P. of M.*, ii, Pt. I, p. 250. This ring, acquired in Crete by an archaeological visitor in 1927, is now in my own Collection.

² *B.S.A.*, xiii, Pl 4; cf. *P. of M.*, ii, Pt. I, p. 252.

³ See *P. of M.*, ii, Pt. I, p. 245, Fig. 142; and cf. Karo, *Arch. Assoc.*, 1916, p. 147, Fig. 4. There seem here to be three separate scenes:

(1) a male or female personage in their original habitation, (2) farewell scene—female personage about to depart, (3) the same seated in similar shelter on board a vessel. No religious associations such as pillar shrine, sacral horns, or tree are here given, and the subject may therefore be one of a purely heroic cycle. (For the design see Fig. 926 at end of Section.)

time with the purely natural pose and action, is unparalleled among Minoan religious impersonations. The naked female clay figure that occurred amongst those from the late Shrine of the Double Axes on the Palace site,¹ seated with its arms crossed over the breasts and grotesquely rude in execution, represents a recrudescence in religious Art. It is in fact a survival from much earlier images such as those of the Cycladic class. Elsewhere, as on certain Cypro-Minoan cylinders where the naked Goddess appears, she merely reflects the nude types of Ishtar. For the slurring over of the head—at times a mere knob in Late Minoan Art—a still earlier parallel may be sought in the female figures of Spanish Cave-men, as at Alpera.

shrine—
remark-
able pose
and
action.

Among the characteristic elements in the details of the intaglio on the present signet most likely to strike the observer's eye is the convention by which the waved surface of the sea is here rendered by means of a reticulated pattern. This convention itself is closely akin to that illustrated by other Minoan works in which the rocky surface of the ground is reproduced by a simple scale ornament—a convention that has been shown above to be of Oriental origin and to go back to a remote Sumerian Age.² A variation of this in which the scale-pattern shows a tendency to assume a reticulated aspect, like a pattern on the robes of the 'Ladies in Blue',³ appears on a steatite relief from a more or less contemporary 'rhyton' presenting an archer 'proceeding to mount a rocky steep', found to the North-East of the Palace site at Knossos.⁴

Reticu-
lated con-
vention
for sea
surface—
parallel
indication
of rocks.

By the transitional M. M. III-L. M. I *a* epoch the pattern, as here seen, seems to have been very generally taken over from its equivalence with rocky land surface to represent the uneven and irregular surface offered by the sea waves.⁵ It is thus employed on the silver 'rhyton' from Mycenae with the siege scene, the lower space of which is largely filled by a winding arm of sea,⁶ where naked men swim for their lives, apparently pursued by the dog-headed monster of the deep. On a painted 'rhyton' from Psira of somewhat later date (L. M. I *b*) a reticulated pattern surrounds swimming dolphins. The same reticulated background—which at this time seems to have represented the sea itself—also occurs in sole relation to a robed personage, best identified with the Minoan Goddess,

¹ *P. of M.*, i, p. 52, Fig. 14.

² See *ib.*, i, pp. 312-14, and Fig. 232.

³ *Id.*, ii, Pt. II, p. 731, Fig. 457.

⁴ *Id.*, iii, pp. 100 and 106, Fig. 59.

⁵ This seems to be the most natural explanation. The marine equation might also

have been suggested by rocks as seen beneath the surface of the pellucid Aegean shallows, but the sea bottom is also often formed of sand or shingle.

⁶ *P. of M.*, iii, p. 91, Fig. 50, and cf. p. 96, Fig. 54.

and wearing, it would seem, her triple tiara, on a seal impression found in an isolated position on the East side of the Domestic Quarter of the Palace (Fig. 925). Here, as Lady of the Sea, she actually reposes on the waves.

The
Minoan
proto-
types
of Hagia
Pelagia.

The Goddess depicted on the signet designs with this marine convention as a background and in the act of navigating her bark, and whose shrine appears on the sea-girt headlands of rock on either side, may surely be regarded as here representing her sea dominion. It would seem indeed as if, under later titles, her particular cult, more recently embodied in that of Hagia Pelagia, had survived on the actual site of the old harbour town of Knossos.¹ As traditional founder of the first sea dominion in Mediterranean waters, it might well be thought that Minos himself could have selected no fitter design than that before us as the subject of the signet-ring. A suggestive detail in the Temple Tomb described below is an incompleting graffito sketch of a Minoan galley, engraved on a slab of the gypsum casing of the rock-cut sepulchral chamber.²



FIG. 925. SEAL IMPRESSION FROM DOMESTIC QUARTER SHOWING GODDESS REPOSING ON WAVES.

¹ See especially *P. of M.*, ii, Pt. I, pp. 251, 252.

² See Suppl. Pl. LXVI b. The slab with this is opposite to the entrance.

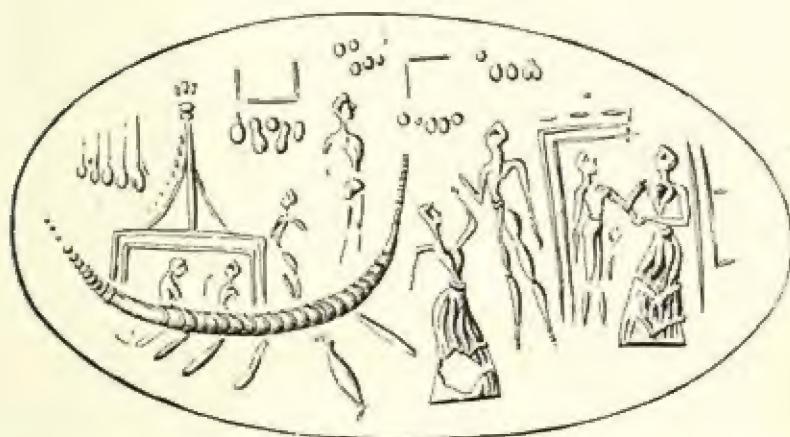


FIG. 926. GOLD SIGNET FROM TIRYNS TREASURE, SHOWING PARALLEL SCENE OF DEPARTURE OVERSEAS, IN THIS CASE PROBABLY OF A HEROIC CHARACTER: SEE NOTE 3, P. 954. (1)

§ 117. EPILOGUE: PART II. LEGENDARY AND LITERARY TRADITION
REGARDING MINOS' RING AND HIS TEMPLE TOMB.

The Signet-ring of Minos in Greek legend; Theseus recovers ring with Amphitritê's aid; Amphitritê as reflection of marine aspect of Minoan Goddess; Records of Minoan masterpieces in Greek Epic; Tradition of 'Double Tomb' of Minos in Sicily; Epimenides and the Cretan traditions preserved by Diodôros; Minos' Sicilian Expedition; His fate and 'Temple Tomb'; Royal Tomb at Isopata of different type; Hopes borne out by discovery of Temple Tomb at Knossos.

By an interesting coincidence traditional records have survived both of an episode connected with a signet-ring of Minos, and of the interment of the last legendary king of that name in a 'double tomb' which, though constructed overseas, shows a curious correspondence with that to which the discovery of the Ring directly led on the site of Knossos.

Theseus and the Signet-ring of Minos in Greek Tradition.

Greek heroic tradition, as is well known, had preserved a tale relating to the signet-ring of Minos.¹

According to this,² the Cretan king, who had sailed in person to Athens to select the captive boys and girls, on his return voyage had a dispute with Theseus, the most noble of them. On Theseus vaunting himself to be a son of Poseidôn, Minos, the offspring of the Cretan Zeus—who could bring down the lightning flash as a sign of his own divinity—in order to test the claim takes off his signet-ring from his finger and casts it into the sea, bidding the hero to fetch it back. Theseus, diving down, and mounting on a dolphin, reaches the hall of Amphitritê in the sea depths and through her and her Nereid train recovers the ring.

The story was illustrated in one of the paintings of Mikôn on the walls of the Theseion, as also on a series of painted vases, including the famous *kylix* of Euphronios¹ and the great *krater*, known as the 'Fran-

The
Signet-
ring of
Minos in
Greek
legend.

¹ The main features of the story are here summarized. So far as literary evidence goes, it formerly rested on the account given by Hyginus (*Astronomica*, II. 5), and Pausanias I, 17, 2, 3 (cf. Frazer, *Pausanias' description of Greece*, II, pp. 157, 158). To these sources that of Bacchylides' paean has been now added

from the recently discovered papyrus (see Sir Frederic G. Kenyon, *The Poems of Bacchylides, from a papyrus in the British Museum*, 1897, No. XVII, and p. 153 seqq.).

² Theseus is also represented as giving it to Ariadnê.

Theseus
recovers
ring with
Amphi-
tritë's aid.

çois Vase', by Kleitias and Ergotimos. On none of the vase paintings, however, is the ring itself in evidence, and we seem justified in concluding that the same omission had occurred in Mikôn's masterpiece. Neither is this essential feature of the tale so much as mentioned by Bacchylides, whose rediscovered 'paean' is the latest contribution to the literature of the subject.

Amphi-
tritë as re-
flection of
marine
aspect of
Minoan
Goddess.

From the point of view of Ancient Religion the most suggestive feature is the prominence given to the female divinity Amphitritë, whose consort Poseidôn is left in the background. At the same time the equivalence, emphasized above, of Amphitritë herself—Queen of the Sea and Mistress of its Sea-Monsters—with the Minoan Goddess in the same capacity, with her hippocampus-prowed boat, takes us still more definitely back to the pre-Hellenic stratum. The leap into the sea with which the story is bound up is itself seen to belong to an early Cretan cycle²—witness the Delphinian Apollo and the wild plunge of the flying Diktynna (or Britomartis) from the sea cliff. Certainly, from an artist's point of view, the Goddess's wreath, presented to Theseus by Amphitritë, formed a better subject for illustration, but no object referred to in the whole story has more purely Minoan associations than the signet-ring (*σφραγίς*), in which it centres. It only needs a glance at the first part of the present Volume and at what has been said before regarding the still earlier seal-stones of Crete to realize the large part which the signet has played in the inner economy of Minoan life both in the origin of the pictographic script and the evolution of artistic types that in some respects have never been surpassed. The signet is the very emblem of Minoan civilization.

Records
of Minoan
master-
pieces in
Greek
Epic.

The present writer long since ventured to put forward the view that the singularly accurate descriptions of master-works of Minoan Craft that appear in Homer but had already become no longer extant at the epoch of the Achæan invasions, owe their literal description to having been already embodied in earlier lays. These had been taken over and incorporated in the later Epic during the transitional Age when the speech of the country was still largely bilingual—as indeed a large part of Crete remained to much later days.³ As has been often noticed, the 'Cup of Nestor' finds its material prototype in the Dove Goblet from the Fourth Shaft Grave at

¹ W. Klein, *Euphronios*, p. 190 seqq.

² See on this, S. Wide in *Theseus und der Meersprung* (Benndorf *Festschrift*), but his conclusion that the ring episode, on which is based the whole plot of the Minos-Theseus

episode, is a later intrusion ('Einschiebsel'), is directly at variance with the probabilities of the case.

³ A. E., *Minoan, &c., Element in Hellenic Life* (J. H. S., xxxii), p. 287 seqq.

Mycenae. The 'Shield of Achilles' preserves the memory both of Minoan technique and of an artistic composition akin to that of the Knossian Mosaic showing a town and its surroundings, with trees, cattle, and warriors. Heroic episodes, such as the combat between Hector and the Telamonian Ajax or the fall of Periphétês, already find their anticipation in Minoan intaglios. If we may imagine that some earlier lay had in the same way contained the tale of the jettison and recovery of the ring of Minos, a not inappropriate illustration would have been found for its subject in the picturesque and finely engraved design on the recently emerged signet that led to the discovery of the Temple Tomb. The Lady of the Sea who there appears crossing the waves on her hippocamp-shaped prow—Amphitritê in her earlier form—was here, indeed, the divine protectress of no alien hero, but of Minos himself.

Tradition of Minos' Expedition to Sicily and his Double Monument there— Temple and Tomb.

There exists, moreover, a literary authority for an episode—linking Crete with Sicily—which has found another remarkable illustration in the actual structural character of the Temple Tomb described below.

Tradition
of Double
Tomb of
Minos in
Sicily.

Throughout the whole story of discovery that has shown Crete to have been the scene of a civilization far anterior to the Greek, nothing has been more striking than the confirmation thus brought to light of the early traditions preserved by the Sicilian historian Diodôros. We know that one of his authorities was the Cretan prophet Epimenides of Knossos—also spoken of as a 'divine' (*theologos*) in the same sense as the writer of Revelations—who is truly said to have had one foot in an older World. To him was due a long epic on 'Minos and Rhadamanthos' and, though writing in Greek at the end of the Seventh Century B.C., he may well have been acquainted with Sagas in the older tongue, still current. Was he not a member of a Guild of 'Kuretes', whose traditional names are of Old Carian relationship?

Epi-
menides.

The statement that the Phoenicians had not invented letters but had only adapted an existing (Cretan) system was never considered worthy of serious consideration till nearly two thousand clay documents in an advanced linear script came to light in the Palace archives at Knossos. What more signal confirmation, again, could be imagined of the claims put forward for the religious indebtedness of Greece in her most holy places to Minoan Crete than the emergence from beneath the inner sanctuary of the Delphian

Cretan
Traditions
preserved
by Dio-
dôros.

Apollo of a ritual vessel, the double of which was found in the Treasury of the central Shrine in the great Minoan Palace?

Minos' Sicilian Expedition.

His fate and Temple Tomb.

From the same records we learn that the last Minos, pursuing the runaway Daedalos to Sicily, had taken refuge with the native King Kokalos, the story of whose treachery in pushing him into a bath of boiling hot water may itself have originated from the bath-like form seen among Late Minoan clay coffins.¹ More significant still, however, is the sequel. His Cretan followers, to whom the body of Minos had been handed over as the victim of an accident, buried him, we are told, in a magnificent manner, laying his bones in a concealed tomb beneath the earth² and building above it, visible to all, a temple of Aphrodite—the 'Lady of the Dove', who at Elymian Eryx³ was still regarded as one and the same divinity as those of Kythera and Paphos. This last detail is valuable, as it takes us back to the prehistoric stratum of Cretan religion, in which Minos stood in direct relation—not, as later, to Zeus—but to the great Mother Goddess.

The whole course of the excavations at Knossos has emphasized the fact that the 'House of Minos' was a sanctuary quite as much as a palace. It was in fact a home of a succession of Priest-kings.

Royal Tomb of Isopata of another type.

It was natural then to suppose that the burial place of these might also conform to the old tradition, and, in the course of the early explorations, I had myself been inspired by the hope of finding such a 'temple tomb'. But the only tomb discovered that had a claim to be called 'royal'—that brought out at Isopata, at some distance from the Palace, on a height overlooking the harbour-town—though of considerable architectural interest, was still simply a burial vault of a keeled and corbelled type, compared above to the 'Royal Tombs' of Ras Shamra.⁴ It may well have been that traditionally connected with the warrior prince Idomeneus, who was said to have led eighty ships—the largest contingent—to the siege of Troy.

The new light, indeed, thrown on the Isopata Tomb by the 'Royal

¹ The actual discovery of Late Minoan pottery in Sicily due to Professor Orsi's researches, from 1891 onwards, has itself been long known, though it did not reveal bath-shaped *larnakes*. A resumé of it is given in my *Preh. Tombs of Knossos* (*Archæologia*, lix, pp. 498, 499, and notes). The interesting point is that, though the pottery to hand is L.M. III, swords found with them, which are of indigenous fabric, are derivatives from good L.M. I prototypes, to be matched both at

Mycenae and Knossos. (See, too, J. Naue, *Die vorrömischen Schwerte*, p. 9.) We have here an archaeological proof that there was in Sicily a continuous tradition from the great days of the Later Palace.

² Diod., l. iv, c. 79, 3. Later on (*op. cit.*, c. 79, 4) when the Akragantines built a city here (Herakleia Minoa) the bones were returned to the Cretans.

³ Diod., l. v, c. 77, 5.

⁴ See above, p. 771 seqq.

Tombs 'discovered by Professor Schaefer on the North Syrian Coast—the evidence of a Late Minoan plantation on that side—has brought out the fact that it was specially designed to stand in relation to a ritual cult on the surface of the ground above. But it was in no sense a 'double' monument.

Hopes
borne out
by dis-
covery of
Temple
Tomb at
Knossos.

At a time, however, when my former expectations had been well-nigh forgotten, they were literally fulfilled. They have materialized in the discovery in the glen above the Palace site (see Fig. 927) of an actual 'double tomb' of the kind described by Diodôros, with the sepulchral vault hidden in the rock below and, above—once more visible to the eye—the remains of a small Temple of the Goddess.

The Eteocretan traditions on which the historian drew prove once more to have been faithfully handed down from a remote, Minoan source.



FIG. 927. VIEW FROM S.W. ANGLE OF PALACE SITE SHOWING MINOAN VIADUCT AND 'CARAVANSERAI' IN FOREGROUND AND, BEYOND, THE KAIRATOS GORGE (FOLLOWED BY THE GREAT SOUTH ROAD), THE SITE OF THE TEMPLE TOMB BEING MARKED BY A CROSS.

§ 117. EPILOGUE: PART III. DISCOVERY OF TEMPLE TOMB: UPPER SHRINE AND PILLAR CRYPT WITH ROCK-CUT SEPULCHRAL CHAMBER BELOW.

Clue supplied by finding of Signet-ring; Lateral glen of river gorge South of Knossos; Discovery of Chamber Tombs; Presumed tomb-robber's cache with choice beads of gold and other materials—dated to L. M. Ia by pottery, &c.; Discovery near by of Temple Tomb; Upper Structures—Column-base and Horns of Consecration; A small Upper Temple; Its entrance from paved roof terrace; Traces of red painted stucco on walls; Full evidence supplied of timber floor supports; The Pillar Crypt below and Double Axes finely cut on blocks; Entrance from Crypt to Sepulchral Chamber cut in rock; A 'Temple Tomb' like that of Minos in Sicily; Its clearance necessitates sinking shaft 23 feet through rock; Rock chamber with central pillar; Massive cypress cross-beams above vault; Interspaces of rock ceiling painted kyanos blue; Plain clay vessels within, M. M. III b, but valuables (including ring) removed; Sepulchral chamber itself a ritual Pillar Crypt; Cupped offertory block of igneous stone—of prehistoric Egyptian type; Derivatives of similar blocks in Early Minoan Ossuaries, accompanied by other objects of early Nilotic tradition; Other prehistoric Egyptian stone vessels from Knossos; Religious connexion with Delta; Knossos solitary Cretan find-spot of early imported Egyptian stone vessels, prehistoric and proto-dynastic; Middle and New Empire connexions with Crete recalled; Increasing Egyptianization under Late Dynasty.

Clue afforded by the Signet-ring.

Clue supplied by finding of Signet-ring. Lateral glen of river gorge to S. of Knossos.

THE glen in which the gold signet-ring had been picked up was overlooked in succession by two rocky headlands, the detritus from these covering the lower parts of their limestone steeps. As in similar cases, this circumstance rendered the banks thus formed a promising hunting ground for the entrance passages of rock-cut tombs. Conditions so favourable, superadded to the discovery of what could not be less than a royal relic, decided me to organize a massed attack on the position for the ensuing season of 1931.

Discovery of Chamber Tombs.

Trenches dug along the borders of the lower slope of the headland to the South revealed the existence of a series of chamber tombs. These had been a good deal ruined and disturbed, but the Fourth Tomb was found to contain, with minor relics, a fine spouted bowl in the 'marine' L. M. I b style illustrated above.¹

¹ P. 279, Fig. 214.

PLATE XXXIV



BEADS OF GOLD (INCLUDING CALF), AMETHYST, CORNELIAN, FAIENCE, AND
GLASS IMITATION OF AMETHYST, FROM DEPOSIT NEAR TEMPLE TOMB

Tomb Robbers' *Cache* of L. M. I a Date.

The fifth rock-cutting, however, brought to light a dozen paces or so above the spot where the signet-ring had been found, proved to be of a different character.

Presumed
Tomb
robber's
Cache
with
choice
beads.



It was irregular and showed no indication of any inner chamber in connexion with it. No traces of bones were found within it, and its whole appearance suggested its having been made to conceal a deposit of valuable objects,¹ though of these, owing to disturbance and plundering, only small remains had been left in the pit.

The gold beads here found, illustrated in the Coloured

FIG. 927 bis. PAINTED SHERDS FROM *CACHE*: L. M. I a. (SEE P. 964.)

Plate XXXIV, included specimens of remarkable workmanship. The calf's head (centred above) follows a good naturalistic tradition and the lotus bud below it is of exquisite design. The grooved cylinder, the form of which is imitated on one or two of the gold beads, answers to a type that comes into vogue in the mature L. M. I a and succeeding epoch.² The number of forms included in the series of gold beads brought to light in this deposit is itself surprising and clearly indicates that they represent several necklaces such as normally are composed of not more than one or two different forms. Here, in addition to the calf there are nine distinct types, and counting sizes, twelve different varieties. The series found, in fact, shows a selection representing the owner's share of a much larger hoard of jewellery.

The date of the *cache* was itself well marked by fragments of painted

¹ Mr. John Pendlebury, the Archaeological Curator of Knossos, who superintended the excavation of this cutting, came to this conclusion.

² See above, p. 493, and *P. of M.*, ii, Pt. I, p. 75, Fig. 34, E.

Cache
dated by
pottery
and bead
forms
to L. M.
I a

vessels of two classes belonging to the mature L. M. I a phase (Fig. 927 *bis*). One represents an imitation of conglomerate rock such as was a good deal in evidence at Gournià,¹ the others are late offshoots of the 'tortoise-shell ripple' ware.² The date thus certified corresponds, it will be seen, with that of the gold signet-ring and also answers to that of a considerable catastrophe that befell both the Palace, and, as shown below, the neighbouring 'Temple Tomb'.

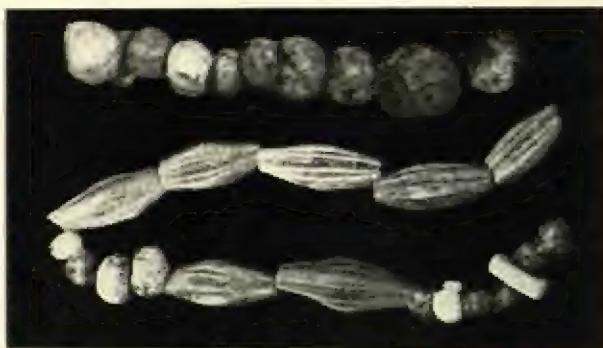


FIG. 928. PASTE BEADS FROM SEPULCHRAL CHAMBER OF 'TEMPLE TOMB'.

It is further to be noted that a series of specimens of a globular type of glass beads of amethystine hue occurred in the deposit such as are often associated in Egypt with XVIIIth Dynasty burials, and which are themselves derived from an original amethyst form very characteristic of the Middle Empire. Glass beads of the same type, probably imported from Egypt, were also found in the inner rock chamber of the Temple Tomb as described below. Some of them are here illustrated (Fig. 928) together with an almond-shaped ribbed type of paste beads which stand in close relation to the bead from the present deposit, illustrated in the Coloured Plate, to which attention has been called above, as well as of several gold types there represented. This comparison is the more cogent in view of the fact that the beads of glass paste were, according to a usual Minoan custom, often covered with gold-plating.

The 'Ring of Minos' itself lay only a few paces below the spot where this *cache* occurred—as we have seen of contemporary date—can fairly be regarded as standing in relation to this deposit. It, too, may well have formed part of a robber's share in the plunder of the Royal Tomb at the time succeeding its great catastrophe.

Discovery of the 'Temple Tomb': the Upper Sanctuary.

Discovery
near by of
'Temple
Tomb'.

About the time that the exploratory trenching had reached this point, the owner of the vineyard supplied a valuable clue by pointing out a spot where in course of cultivation he had struck some large blocks, apparently

¹ Boyd-Hawes, *Gournià*, Pl. VIII, 40, &c.

² See above, *P. of M.* i, p. 600, n. 4 and Fig. 441.

belonging to wall construction. The spot indicated was some thirty paces North-West of that where the signet-ring had come to light and immediately beneath the rocky steep of the second headland. On sinking a test pit here, we laid bare, a foot or two below the surface, a massive line of rough walling consisting of exceptionally large blocks, built against a cutting in the rock steep. The rough walling turned East at right angles on both sides, giving the outline of a quadrangular structure the upper part of which must have stood free above the ground. Below this, again, the face of corresponding walls of good masonry began to be laid bare and we found ourselves in a chamber descending deeper and deeper into what proved to be a considerable rock cutting in the hill-side (see Fig. 929).

The floor of the upper structure was clearly defined by spaces in the masonry of the side walls which eventually, in the completest manner, supplied the reconstruction of the great beams and cross-rafters that had supported it. Its level and the character of the building was further marked by the occurrence of limestone 'horns of consecration',¹ and a gypsum column-base—clearly one of two—that had stood in relation to the Western of two pillars that later came into view in the room below (Fig. 930). Here, clearly, rose an upper bicolumnar sanctuary of the Goddess 'open to the air'² as in the case of the 'double sepulchre'—at once royal tomb and temple of 'Aphroditê'—traditionally recorded to have been raised in Minos' honour on the Sicilian shore.³

Upper structure: Column-base and 'Horns of Consecration'.

A small upper Temple.

The entrance to this upper shrine, marked by two gypsum jambs, was by its North-Eastern corner, at a slightly higher level than the adjoining roof basement. From the terrace of this, paved with green schist slabs, it would have been approached by three steps. As was brought out by the subsequent excavation, this roof terrace itself stood in connexion on one side with an inner staircase leading down to the basement floor, and on the other by three descending steps to the rock platform that formed the starting-point of the whole entrance system. Worshippers could by this means make their way to the small Temple of the Goddess without entering the sepulchral system of the building.

Entrance from paved roof terrace.

The North wall of the sanctuary chamber was slightly splayed out in a Westerly direction, an irregularity which, as afterwards appeared, was due to the relation of the Pillar Crypt below to the sepulchral vault cut in the rock. The walls of this little Temple were, as already noted, very massively

¹ Restored in Fig. 930. Their position was probably between the two columns, and not as shown in the Figure.

² Κατὰ ἀνεργυμένον τῶπον.

³ Diodoros, iv, c. 79, 3: See above, p. 960.

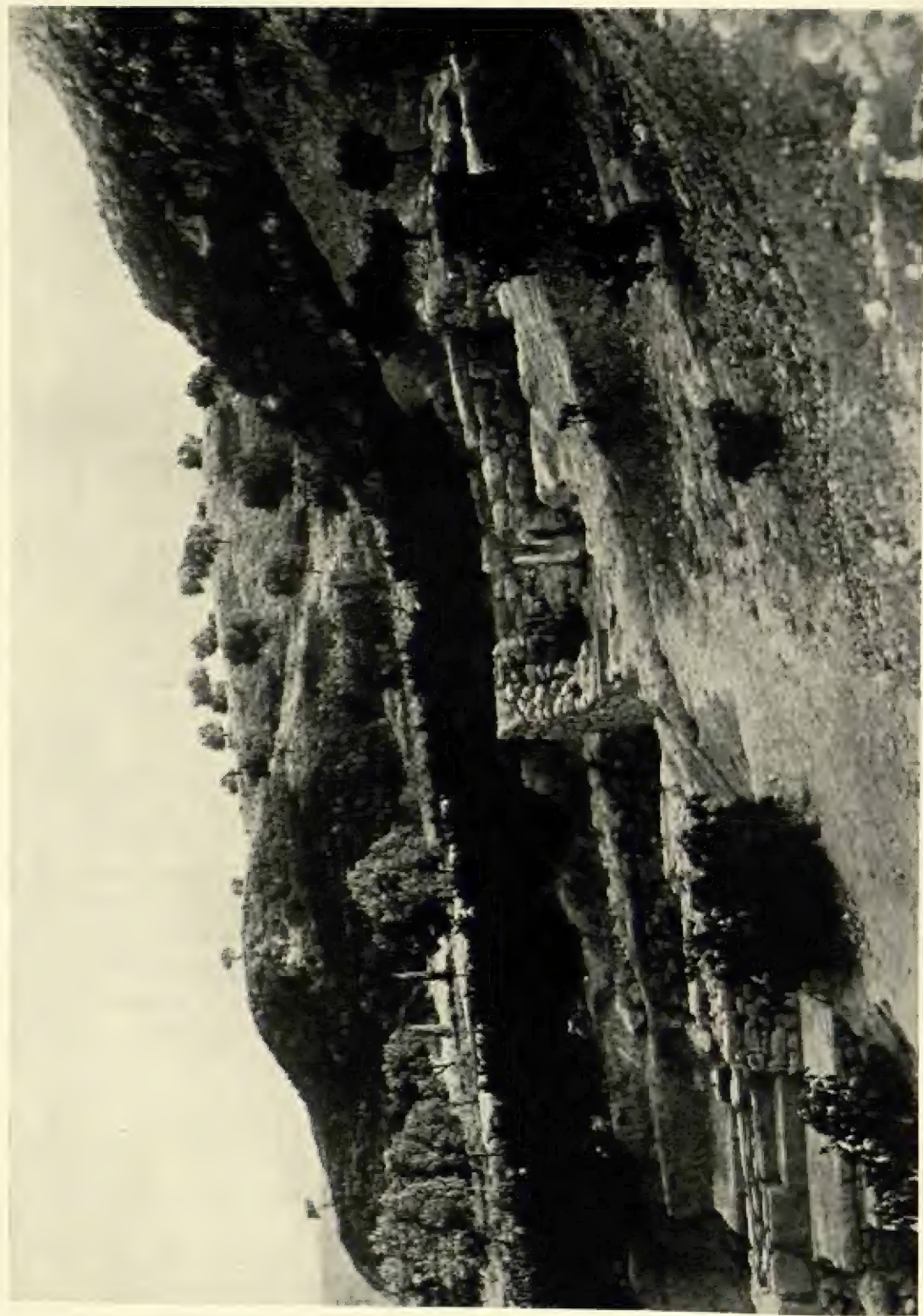


FIG. 929. SITE OF TEMPLE TOMB, CUT INTO THE ROCK STEEP OF GORGE, SURROUNDED BY A VINEYARD.

constructed of large roughly hewn blocks, having on its North and South sides a mean thickness of at least a metre, and along the back, of a metre



FIG. 930. VIEW OF UPPER SANCTUARY FROM N.W. SHOWING 'HORNS OF CONSECRATION' AND S. COLUMN-BASE ON RESTORED PAVEMENT (FROM N.W. CORNER).

and a half. At the back, where it was set against the face of cut rock, it was preserved to a height of between two and three metres.

The rough interior face of the walls had been coated with stucco, remains of which belonging to the lower part of the structure showed a Venetian red wash. There is a fair presumption that a frieze of a more varied character had existed at a somewhat higher level, and we may well imagine that its subject was not unconnected with the Minoan Goddess as

Traces of red painted stucco on walls.

'Lady of the Sea'. Unfortunately owing to the denudation and drift caused by the position on the hill-side all trace of this and of the upper part of the monument had entirely disappeared.

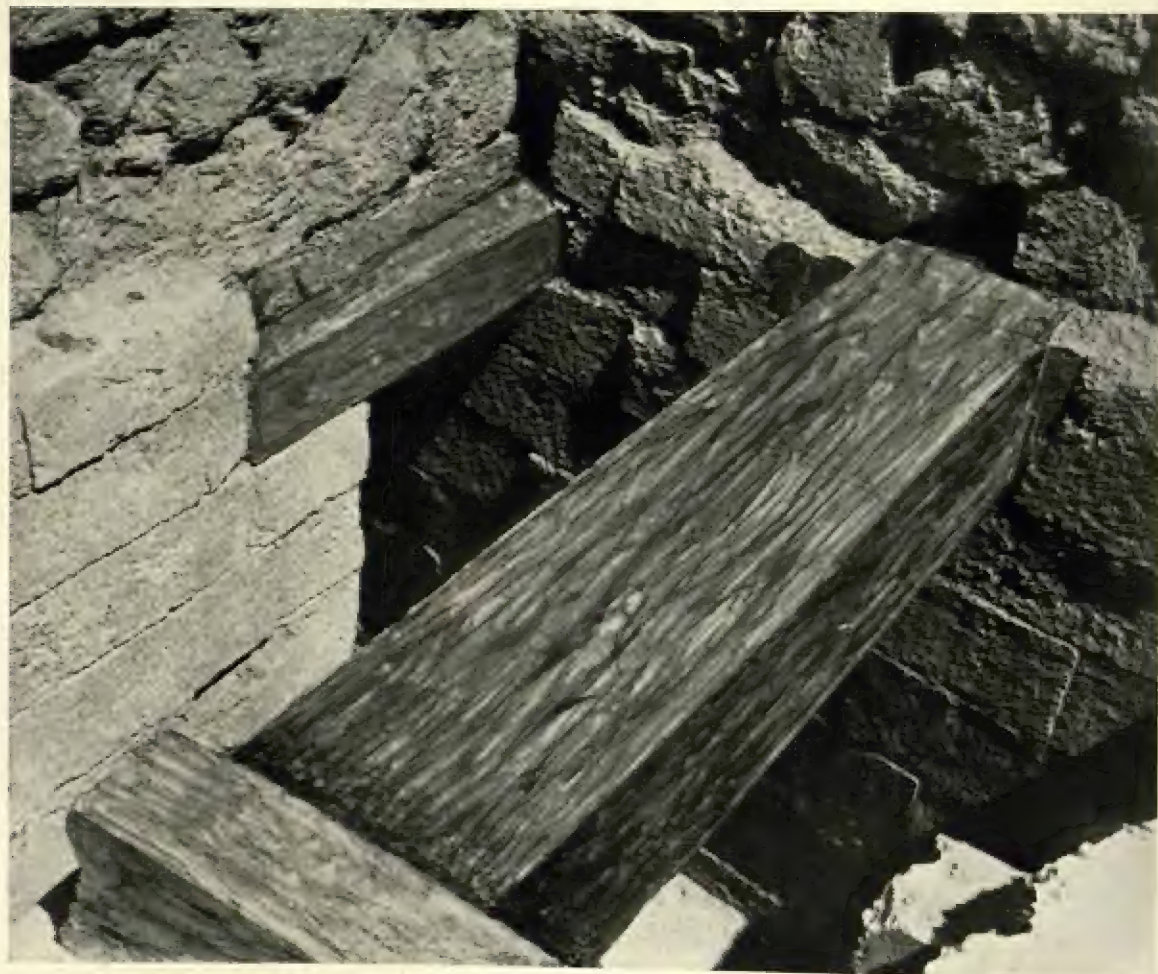


FIG. 931. ONE OF THE TWO MAIN BEAMS SUPPORTING FLOOR OF UPPER SANCTUARY, RESTORED. ENTRANCE TO ROCK-CUT CHAMBER SEEN BELOW.

The Timber Construction of Floor.

The evidence regarding the beams and rafters that formed at once the roof of the Pillar Crypt below and the floor support of the Sanctuary Chamber above is of outstanding interest. The arrangement and calibre both of the great main beams resting on the pillars found in position below and of the solid joists that traversed these above can be accurately

Full
evidence
supplied
of timber
floor
supports.

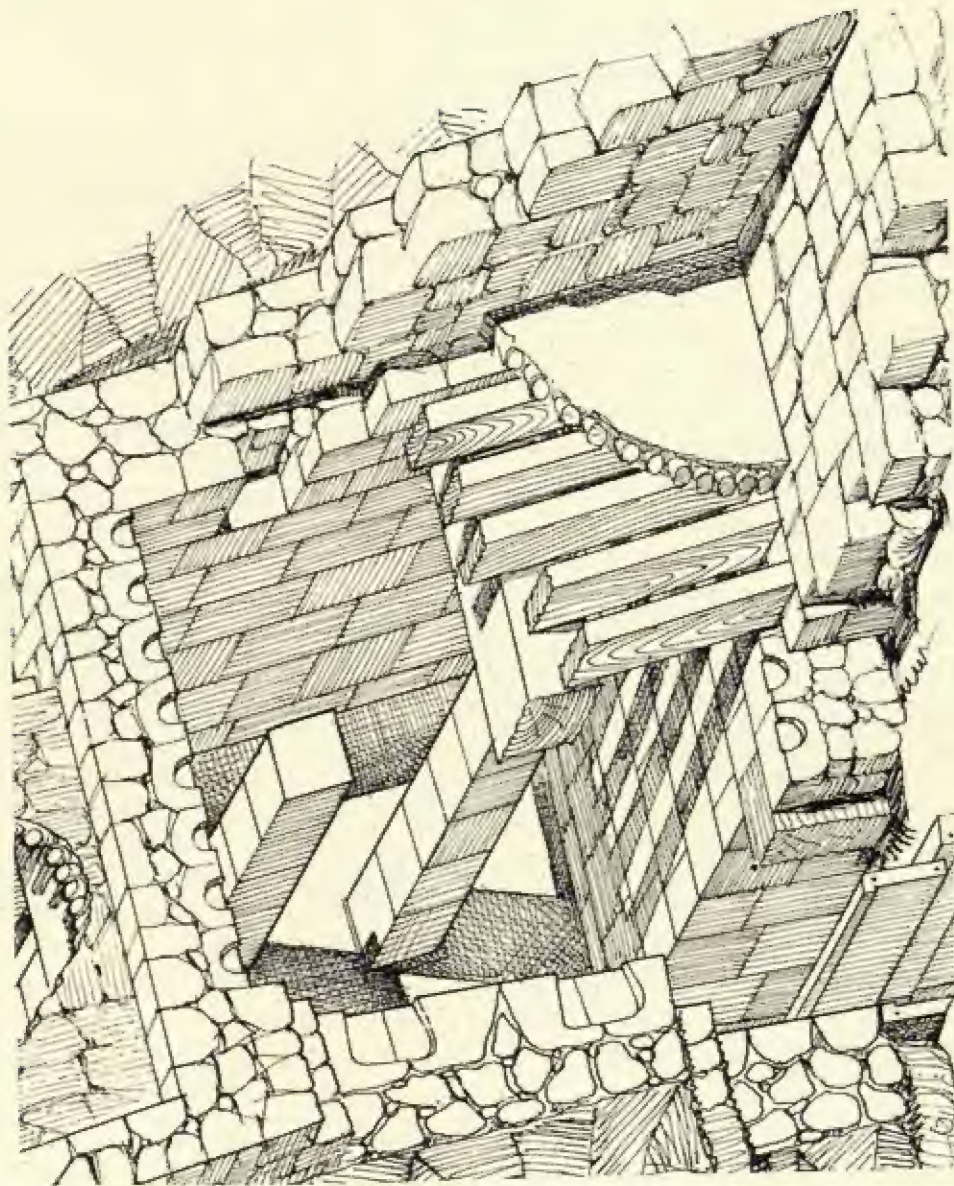


FIG. 932. ISOMETRIC DRAWING, LOOKING DOWNWARDS FROM THE NORTH-EAST AND SHOWING FLOOR STRUCTURE OF UPPER SANCTUARY AND SUPPORTING PILLARS OF CRYPT BELOW WITH ONE OF THE MASSIVE CROSS-BEAMS RESTING ON THEM. BELOW, TO THE RIGHT, IS SEEN THE ENTRANCE PASSAGE TO THE SEPULCHRAL CHAMBER. ALONG THE UPPER PART OF THE WALLING ARE VISIBLE THE SOCKETS OF THE BEAMS AND CROSS-RAFTERS. BY PIET DE JONG. (SEE, TOO, COMPLETE PLAN IN POCKET AT END OF PART I OF THIS VOLUME.)

recovered from the clear-cut sockets visible at two levels in the surrounding masonry. The two main beams that crossed the open space from North to South resting on the pillars were as nearly as possible half a metre square, their length, owing to the splaying of the North wall, varying from 5.60 to 5.90 metres. The ends of these, one of which is restored in Fig. 931, were inserted in spaces left between blocks high up on the lower walls. In the topmost layer of these, again, immediately above them there were also preserved at intervals the cut sockets for lines of joists or cross-rafters, running East and West. The whole construction, as since restored in ferro-concrete, is well reproduced in Mr. Piet de Jong's isometric view, Fig. 932.¹

Although a good deal of evidence has elsewhere come to light regarding the beams and rafters above halls and pillar-rooms in the Palace itself as well as in the surrounding houses, the only evidence which can compare with the above in its completeness is that of the pillar crypt of the 'Royal Villa'.² There the cross-rafters were rounded and the lower parts of their circumferences were fitted into grooves cut in the upper face of the supporting beams. In the present case the evidence shows that they were square cut. Very little of the carbonized material itself was preserved, but it is clear that it was cypress wood of the same kind as that in use for the beams and shafts of columns in the Palace and elsewhere.

The Pillar Crypt.

It had now become evident that in the course of our downward excavation we were uncovering a square, well-built chamber, as nearly as possible five metres in width from East to West and in the other direction (where, like that above, the North Wall was slightly splayed) about four and a half metres. At 1.20 metres below the floor-level of the upper sanctuary the tops of two square pillars came into view, and the character of the chamber revealed itself as a pillar crypt. The tops of the two pillars and the two dowel holes in the nearest are shown in the photograph, Fig. 933. The pillars were just two and a half metres in height, and on that to the East were traces of a plaster wash and of painted decoration of a reddish hue.

A part of the crypt as finally cleared, with the Eastern pillar supporting one of two great beams, here restored, is shown in Fig. 934. The doorway beyond gives access to the basement Entrance Hall, on the South side of

The
Pillar
Crypt
below.

¹ See, too, his complete isometric Plan of the building in the pocket at end of Part I. especially Mr. Piet de Jong's restored sketch, Fig. 235.

² See *P. of M.*, ii, Pt. II, pp. 407, 408, and

which is a smaller doorway leading to the interior staircase, giving access to the roof terrace.

The special sanctity of the whole structure was marked by the appear-



FIG. 933. PILLAR CRYPT IN COURSE OF EXCAVATION: ENTRANCE TO ROCK-CUT CHAMBER VISIBLE TO LEFT.

ance on the faces of a large number of the blocks that formed the surrounding walls of finely cut double-axe signs, generally reduplicated on the same face. These signs, as in other cases, must be regarded as having been cut at the time that the stones were quarried. It is none the less true, however, that such 'mason's marks'—like those of the ivory and faïence pieces for inlaying—must be held to have a special reference to their destination, the religious character of which is here clearly denoted. Outstanding examples of such a procedure are to be found on the blocks of the pillars in the Crypts of the West Palace region, where they were also repeated on the same block. On the other hand, in the double axe lightly engraved on an upper block of the pillar in the similar sanctuary of the 'South-East House'¹—where

Double
Axes
finely cut
on blocks:
M. M. III
—L. M. I a
char-
acter.

¹ *P. of M.*, i, pp. 427, 428, and Fig. 307.



FIG. 934. EAST PILLAR OF PILLAR CRYPT SUPPORTING MASSIVE BEAM (RESTORED) AND DOORWAY BEYOND, OPENING INTO ENTRANCE HALL. IN THE SOUTH WALL OF THIS IS SEEN A SMALLER DOORWAY, STEPPING UP, LEADING TO THE INTERIOR STAIRS.

the blocks below it are unmarked—it looks as if it had been engraved on the spot as a sign of consecration, otherwise indicated by the pyramidal double-axe stand placed before the pillar. These parallels suggest that this emblem of Minoan divinity may in the case of the Crypt within the Temple Tomb have been painted on the stucco facing of the pillars.¹

Chronological importance attaches to the fact that in the present case the double-axe signs were not deeply incised, after the manner of those on the pillars in the West Palace basements and on M. M. II Palace blocks, generally—but finely engraved like that of the pillar in the South-East House referred to above, belonging to the transitional stage that marks the close of M. M. III and the beginning of the Late Minoan Age. It was, as the earliest ceramic elements within the structure show, precisely to this transitional epoch that the Temple Tomb in its original form belongs.

The Sepulchral Chamber cut in the Rock.

As the clearance of this Pillar Crypt proceeded downwards, a highly interesting phenomenon began to present itself by its North-East angle. About 1.15 metres from this the masonry of the North Wall showed a break. It turned inwards, leaving a short passage-way of that width and about a metre and a half in length between it and the continuation West of the slightly splayed North Wall of the Crypt (Fig. 931). This opening in the masonry, originally roofed with wooden cross-beams, led, immediately beyond, to the entrance of an interior chamber cut out of the virgin rock.

Entrance from Crypt to Sepulchral Chamber cut in the rock.

A 'Temple Tomb' like that of Minos in Sicily.

It was impossible to doubt that we had here hit on the counterpart to the 'secret sepulchre' that, according to the tradition preserved by Diodōros,² was constructed beneath the visible shrine of the Goddess to form the last resting-place of the Minos who had met his fate on the Sicilian shore. Here, too, was a 'double tomb'—half sepulchre, half sanctuary.³ The 'Ring of Minos' had proved itself a sure guide and we were clearly approaching the last resting-place of one or more of the Priest-kings of the neighbouring Palace Sanctuary.

But the clearing of the rock chamber itself proved to be one of the most difficult works undertaken in the whole course of the excavations. The vault itself was largely choked, not only by rubble and clay that had worked

¹ This method of consecration by painting the axe on the pillar may have also been adopted in the case of the Pillar Room of the 'South House' where a double-axe stand was

also placed before it. See *op. cit.*, ii, Pt. I, p. 386, and p. 389, Fig. 223.

² Diod., l. iv, c. 79, 4, and cf. p. 960, above.

³ διπλοῦν τάφον: Diod. *loc. cit.*

Clearance
necessi-
tates
sinking
shaft 23
feet
through
rock.

in through the entrance, but, what was of more ominous import, by chunks of the chalky, and in places a good deal decomposed, rock that had fallen from the roof. A central pillar was still standing, but this itself gave no support since the cypress beams that had originally helped to fill the inter-space were carbonized or absent. Some may have been actually removed.

Taking every precaution, it was possible to excavate a narrow passage against the walls of the rock chamber which proved to be cased in fine gypsum slabbing with intervening pilasters. But the risk involved was so great that it became finally evident that in order to complete the excavation of the vault it would be necessary to open it from above. This method, now perforce undertaken, involved cutting out a broad shaft in the solid rock slope behind the upper sanctuary wall to a mean depth of somewhat over seven metres or about twenty-three feet. As, moreover, the cutting required a certain slant, the average width of the shaft was somewhat over eight metres. The task was only completed after several weeks of concentrated work.

Rock
chamber
with
central
pillar as
seen from
shaft
head.

Fig. 935 gives a view of the rock-chamber from above at the time when its full clearance had been already effected and there remained only a supplementary investigation of the floor. In the second slab on the left a squared hole is visible—doubtless made by a tomb-robber, seeking evidence of a chamber beyond. It curiously recalls the work of a burglar's centre-bit in a modern door-panel. The central pillar is seen guarded from disturbance by radiating struts. The upper edges of the gypsum slabbing and of the corner and centre pilasters into which these were fitted are also clearly shown and the Southern border of the pavement.

Analogies
with
Pillar
Crypt
of 'Royal
Villa'.

An exact idea of the construction of the sepulchral chamber can be gathered from Mr. Piet de Jong's plan and elevation (in cover). It was almost exactly a square, four metres, or thirteen feet, on each side,¹ while the central gypsum pillar was monolithic, 1.80 metres high and 80 centimetres in diameter, its angles of its otherwise square sections being chamfered. It stood, like that of the Pillar Crypt of the 'Royal Villa',² within a slightly sunken square of gypsum slabs within a square border.

Massive
cypress
cross-
beams
above
vault.

As indicated in the section, Fig. 938, right, a great cypress³ beam had rested on the top of the pillar, crossing the vault from North to South, and this in turn was crossed by another similar beam running East and West. The upper edges of the border slabs and tops of the pilasters in which they were locked were also surmounted by similar timbering. The final result seems to have been that only four square fields of the original rock vault

¹ The diameter N.-S. was a few centimetres less.

² See *P. of M.*, ii, Pt. II, p. 407, Fig. 235.

³ Or possibly two beams, side by side.

were left visible, these being massively framed by the beams that crossed and bordered the uppermost section of the chamber.

The evidence of fallen pieces of the 'windows' left in the original



FIG. 935. SEPULCHRAL CHAMBER WITH CENTRAL GYPSUM PILLAR AND LINING SLAB, AS CUT DOWN THROUGH THE ROCK: THE FLOOR IN COURSE OF BEING CLEARED.

rock vault brought out an interesting detail regarding its surface. In order, no doubt, to avoid the risk of detaching pieces of the chalk-like limestone, the surface had been left by no means smooth, but the square faces visible had been, none the less, painted an azure tint with the usual *kyanos* medium.¹ Despite the darkness of the vault—without artificial lighting, impenetrable by mortal eyes—the dead might still be given the illusion of the blue sky above.

Inter-spaces of rock ceiling painted *kyanos* blue.

It was not, indeed, to be hoped, in view of the many signs of a great catastrophe within the building, that the original interments within the rock chamber would have been left undisturbed. That these, together with the Monument itself, dated from the closing phase of M. M. III *b*, is attested by

¹ This decoration of the rock surface rules out an idea (embodied in an earlier version of the Plan) that the spaces between the crossed main beams had been covered over with joists.

Plain clay
vessels
within of
M. M.
III *b* date.

the occurrence of many sherds and even a series of vessels, either whole or capable of restoration, seen in Fig. 936. To these may be here added a surface find (made, at the beginning of the excavations, near the North-West corner of the Monument), of a detachable 'bridge-spout', exquisitely



FIG. 936. M. M. III *b* VESSELS FROM ROCK CHAMBER.

wrought in finely veined alabaster¹ (Suppl. Pl. LXVI *a* 1, 2), with holes bored for riveting to the body of the vase. Its clear-cut, slightly elongated form recalls the earlier Middle Minoan tradition.² Glass imitations of the

¹ Banded alabaster ('albâtre rubanné, de la plus grande beauté') is recorded as existing in the neighbouring Island of Dia (Olivier, *Voyage dans l'Empire Othoman* (i, p. 377 seqq.); cited by V. Raulin, *L'Île de Crète, partie géologique*,

pp. 464, 465). Its location, known in 1800, has to be rediscovered.

² As a ceramic type 'bridge-spouted' vessels cease in L. M. I *b*, one of the last examples being that from the 'Temple Tomb' itself

globular amethystine beads, of Egyptian Middle Empire tradition, well represented in the 'Robbers' Cache', also occurred in the vault (Fig. 928). The complete disappearance both of the mortal remains themselves and of the more precious relics was no doubt facilitated by their having been for the most part contained, as appears to have been the case in some of the Shaft Graves at Mycenae, in wooden coffins, themselves studded with decorative gold plates. Of the fate of the signet-ring and of part of a share of jewellery we have some indications.

But
precious
relics—
including
Ring—
removed.

The Sepulchral Chamber as a Ritual Pillar Crypt.

The Southern section of the Sepulchral Chamber, as seen when cleared and its vault again closed in, is shown in Fig. 937. Its central pillar, of which the Southern face is here included, though of use in supporting the timber framework that minimized the danger of falls from the rock vault, was essentially of the same character as those which in the neighbouring Pillar Room held the weight of the columns in the sanctuary chamber above. As in the case of other Minoan examples, these 'Pillars of the House', over and above their structural functions, were essentially of a religious kind. They were, in fact, baetylic pillars which at any time by ritual acts and intercession could become the actual habitation of a spiritual being, whether of a divinity or of a deceased human being. It is observable that the pillar in the tomb occupied the centre of a sunken square of pavement as was usual in this class of sanctuary crypt and which seems to have been reserved for cult objects and to have been set out with a special view to libations. Here, too, by ritual means the spiritual being, whether celestial or—as in this case we may well believe, ancestral—could be charmed into making the pillar itself a temporary place of indwelling.

Sepulchral
chamber
itself a
ritual
pillar
crypt.

To the inner religious understanding there was, indeed, no need for the presence of the mortal remains themselves for communion with the great departed. Like the Tomb of the Double Axes, North of Knossos, where a column in relief was cut in the inner wall of the chamber, beside which ritual vessels and sacred double axes were found, here too the sepulchral chamber was also used for a shrine.

How far and at what seasons such a sepulchral shrine was rendered accessible to votaries it is impossible to say. The 'Saints' Graves' of Mahometan cult—in its primitive 'baetylic' features so like the Minoan—

(Pt. I, p. 290, Fig. 225 above). An alabaster specimen of coarser material and with the spout in one piece with the body occurred in

the Royal Tomb at Isopata (*Prehistoric Tombs of Knossos*, ii, Fig. 125, 12).

often display to pilgrims the actual coffins of the venerated dead, covered with rich rugs and adorned with the turbans and sashes of the deceased.



FIG. 937. SOUTHERN SECTION OF ROCK CHAMBER SEEN FROM ENTRANCE SHOWING PART OF SUNKEN AREA OF PAVEMENT AND SOUTHERN FACE OF CENTRAL MONOLITHIC PILLAR.

The relation of the rock-cut chamber to the Upper Sanctuary is well brought out in the Section of the Temple Tomb shown in Fig. 938. Nothing can better illustrate Diodōros' description of the double monument set up in honour of the Minos who met his tragic end on the Sicilian shore—the 'temple' in the open space above and the 'tomb' hidden in the rock below.

'Cupped Block', for Food or Drink, of Predynastic Egyptian Type.

Cupped
ritual
block of
igneous
stone of
prehis-
toric
Egyptian
type.

One ritual object to be connected with this vault and of the greatest religious interest has survived all the various fortunes of the Temple Tomb. This is the offertory utensil consisting of a cupped block cut out of an igneous rock which though it had drifted some way outside the entrance of the rock chamber has been now replaced within the vault.

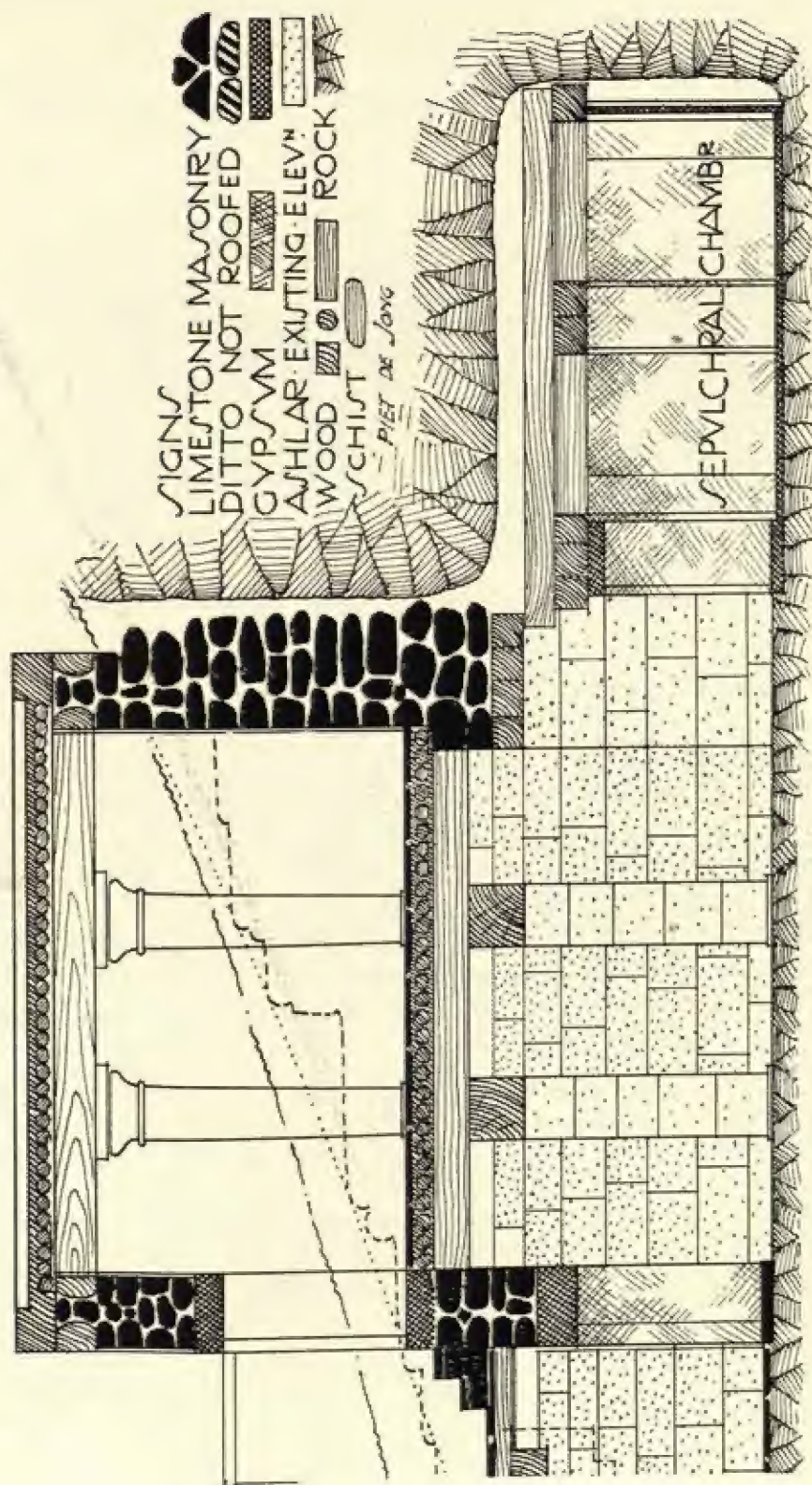


FIG. 938. SECTION OF WEST PART OF TEMPLE TOMB SHOWING SANCTUARY ABOVE AND BELOW, OPENING FROM PILLAR CRYPT, THE ROCK-CUT SEPULCHRAL CHAMBER. (PIET DE JONG.) SEE, TOO, COMPLETE PLAN IN POCKET AT END OF PART II OF THIS VOLUME.

The type of stone vessel here seen, Fig. 939—presumably used for food or drink offerings—belongs to a class which, as already shown,¹ has not only a long history in Crete and Mycenaean Greece, but was

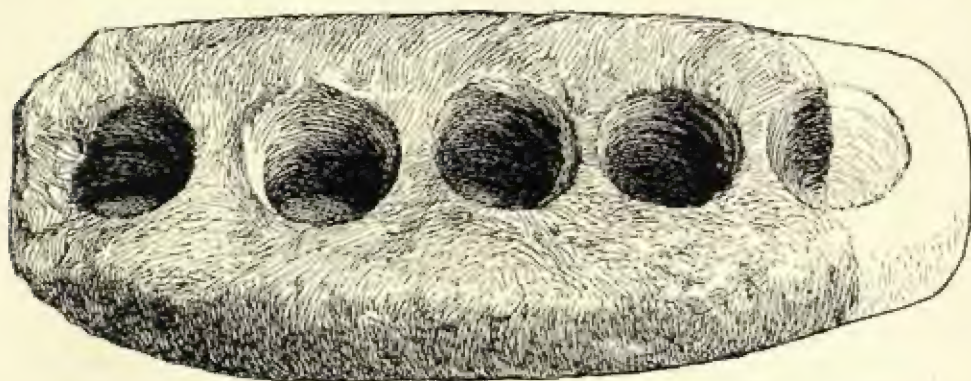


FIG. 939. 'CUPPED BLOCK' OF IGNEOUS ROCK FROM TEMPLE TOMB, OF PREHISTORIC NILOTIC ORIGIN.

derived from analogous cult objects in use in predynastic Egypt. (See Fig. 940.)

The present example was originally provided with five cups hollowed out of the hard stone by means of a cylindrical drill (Fig. 939, with the restored outline).² It will be seen at once that it presents a close analogy to a specimen of the same class of object, formed of a yellowish white limestone from the late prehistoric deposit of Hierakonpolis (Fig. 940 *a, b*)³ below the later Temple there. Although somewhat worn, however, and fractured at the two ends, its edges have clearly presented a more rounded contour than the Nilotic example and, indeed, it is altogether of a more archaic aspect. Owing to the breaks at its two

¹ *P. of M.*, ii, Pt. I, pp. 44, 45, and Fig. 20. A specimen that had certainly served as an heirloom was found in the S. House (L. M. I). At Palaikastro one occurred with a double row of four cups, of a developed type, compared by Prof. R. M. Dawkins with the *kernoi* (*B.S.A. Suppl. Paper* No. 1, p. 135, fig. 116). Fragments of the so-called 'salt and pepper' bowls (cf. Fig. 941, *c, f*) are there stated to have been found in connexion with the Early and Middle Minoan ossuaries of Palaikastro.

² In Fig. 953, below, it is placed at the foot of the central pillar.

³ J. E. Quibell, *Hierakonpolis*, Pt. I, Pl. XXXI. Now in the Ashmolean Museum. It is referred to 'Dynasty O' (before Mena), but the important point is that the associated ivory images (cf. *P. of M.*, ii, Pt. I, p. 25, Fig. 9) supply the best representations of the older 'proto-Libyan' race in the Nile Valley, wholly distinguished from the historic Egyptians by their more European physiognomy, their pointed beards and attire—including the 'Libyan sheath'. The deposit, from the Egyptian point of view, is typically 'predynastic'.

ends, there is no direct evidence of the borings that characterize the ends of the Hierakonpolis block, and in one form or another are constant on

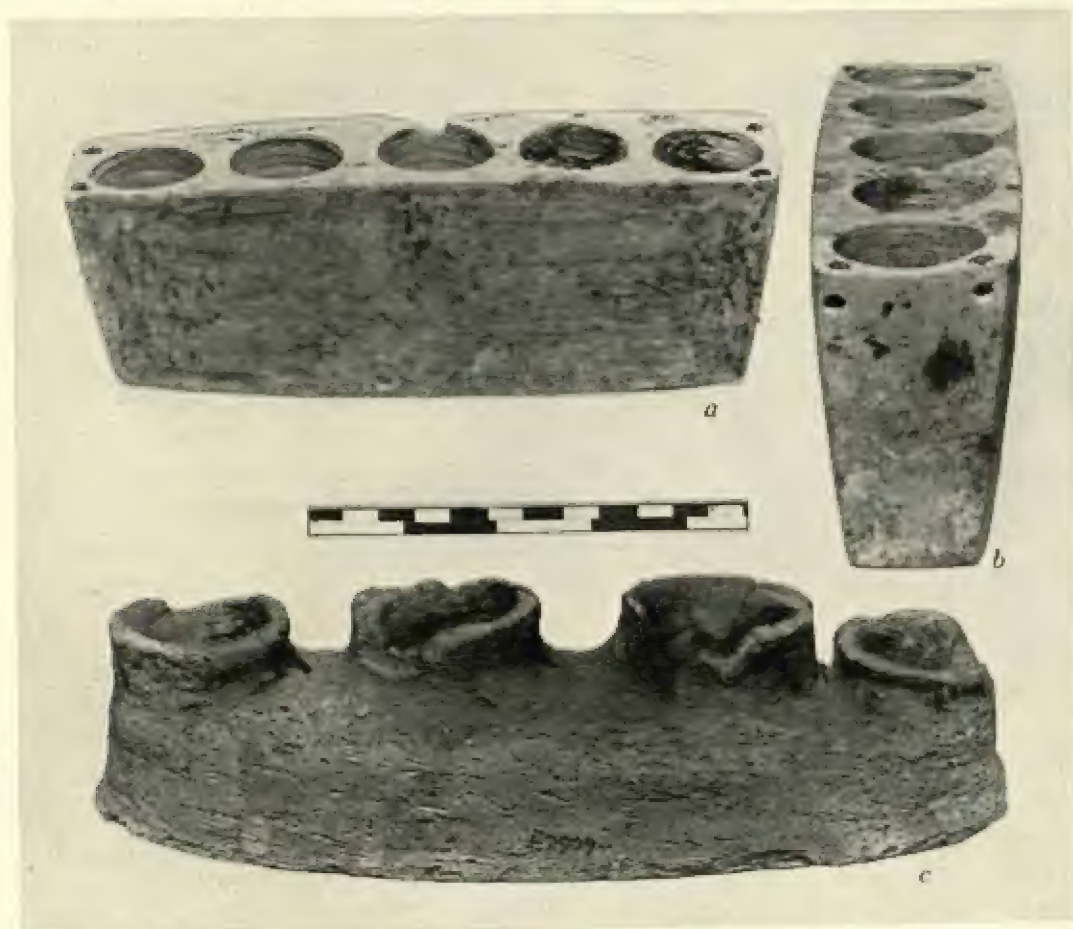


FIG. 940. 'CUPPED BLOCKS' FROM LATE PREHISTORIC DEPOSIT BELOW LATER TEMPLE, AT HIERAKONPOLIS; *a*, *b*, LIMESTONE; *c*, POTTERY.

what may be regarded as a derivative class found in parallel Nilotic and Early Minoan deposits (see Fig. 941).¹ It must therefore be left a moot point whether, as probably in the other cases, it was used for suspension.² In any case the block from the Temple Tomb may with great probability be regarded as of somewhat earlier date than that from the 'pre-dynastic' Egyptian deposit.

¹ In the parallel Nilotic type, Fig. 941, *c*, and the specimens from the Mesara ossuaries, *e*, *f*, the holes are in the middle of the block, though differently arranged in the two cases.

² The clay specimen from Hierakonpolis, Fig. 940, *c*, shows no signs of having been used for suspension.

It will be seen from Fig. 940, *c*, that a parallel type in clay from Hierakonpolis shows the necks of the cups protruding above the upper surface of the block, and this feature is repeated on the brown alabaster specimen¹ (inset) and that shown in Fig. 941, *c*,² which was found at Hu (Diospolis Parva) in a prehistoric grave of the same approximate epoch as that from Hierakonpolis. The examples from the early Vaulted Tombs of Mesarà are best regarded as indigenous Cretan derivatives from this old Nilotic class and show a direct dependence on that source.³ The specimen that here concerns us, however, must be certainly accepted as of prehistoric Egyptian fabric, older indeed in style than that from Hierakonpolis.



The material of this 'cupped block' from the Temple Tomb is a dark igneous rock with minute crystalline specks and does not seem to be of Cretan origin. We have not here, however, a case, such as is otherwise exemplified on the site of Knossos, of a vessel that may have largely owed its importance to its beautifully variegated appearance, such as some forms of porphyry, translucent diorite, or the brilliantly mottled conglomerate.

The Early Minoan versions such as Fig. 941, *c, f* below—forming a special feature among the contents of the primitive vaulted tombs of Mesarà,⁴ must be regarded as somewhat later, indigenous outgrowths of the original Nilotic type here represented. As shown in Fig. 941, and pointed out above,⁵ they are there associated with other objects such as the stone palettes placed beside them and certain forms of primitive stone images which are direct descendants of pre-dynastic types. From these resemblances—as indeed from the 'beehive' form of the ossuaries themselves—the natural conclusion has been drawn that at the time of Mena's Conquest of the Delta some portion of the older stock may have found a refuge on the Cretan shores. The remains of other stone vases of early importation in the transitional Neolithic

Early Minoan cupped blocks associated with other objects of Nilotic derivation.

¹ Von Bissing, *Steingefässe, &c.*, Pl. VI, No. 1877: 'from Upper Egypt'.

² Petrie, *Diospolis Parva*, Pl. XVI, 91 *c*.

³ A more distant offshoot and, apparently, of later date, may be traced in the 'eight-fold stone' vessel (R. M. Dawkins, *Palaikastro* (Suppl. Pl., *B. S. A.*), p. 135, 116. The full contour of eight cups is there given.

⁴ That this influence extended from Mesarà to Northern Crete is conspicuously shown at Knossos itself by the occurrence on

the site of a stone figurine of the prehistoric Egyptian, or 'proto-Libyan type' (*P. of M.*, ii, Pt. I, p. 31, Fig. 13, *b 1, b 2*). A *tholos* tomb of the Mesarà class (M. M. III *a*) was recognized by me at Krasi, some two hours above the site of Mallia, which has since been excavated by Dr. Marinatos. Mr. Pendlebury has since discovered another at Kalergi, N.E. of the Pedeadia Plain.

⁵ *P. of M.*, ii, Pt. I, p. 45 seqq. and Fig. 20.

house beneath the pavement of the Central Court at Knossos supply, indeed, sufficient proof that sea-communications between the two sides of the Libyan Sea had existed from a still more remote epoch. As singular

Other prehistoric Egyptian

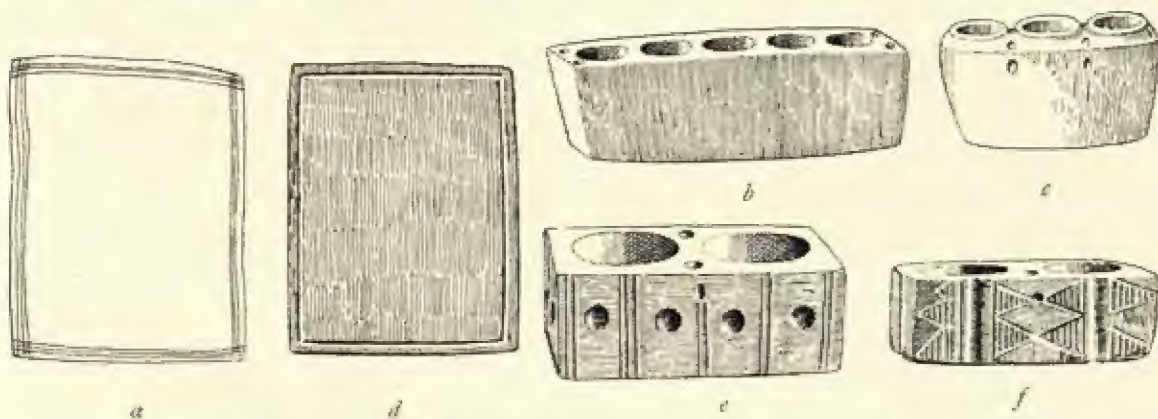


FIG. 941. CRETAN STONE PALETTES AND 'CUPPED BLOCKS' COMPARED WITH THOSE OF PREHISTORIC EGYPT: *a-c* NILOTIC; *d-f* EARLY MINOAN *THOLOS* OSSUARIES, MESARA.

misconceptions regarding both the extent and meaning of the evidence have recently found expression by a high and much respected authority¹ some fuller statement is here called for.

stone vessels at Knossos.

Early Religious Connexions with the Delta.

That, especially as regards the Delta, this continued connexion with Egypt had its religious side has more than once suggested itself in the course of the present researches. The constant recurrence, indeed, of the 'waz' or sacred papyrus rod symbol of Wazet or Buto, Snake Goddess, of the Sebennytic Nile mouth, and its manifold combinations with Cretan religious ornament make it difficult not to conclude that some religious bond existed between her and the Knossian Goddess in her typically chthonic shape. Nor, perhaps, was the infant Horus, hidden by his Mother in the papyrus swamps of the floating island near Buto's shrine—best recorded by the story of the 'ark of bulrushes'²—without its bearing on the Minoan signet scene where votaries bring offerings of reeds to the divine Child on his mother's knees.³

Religious connexion with Delta of great antiquity.

¹ See note 1, p. 985.

² Exodus ii. 3.

³ See *P. of M.*, iii, p. 471, Fig. 328.

Gifts of the Pharaohs and the Priest-kings: Knossos Chief Find-spot of Egyptian Stone Vessels.

Knossos
solitary
Cretan
find-spot
of im-
ported
Egyptian
stone
vessels
proto-
dynastic
and
earlier.

The extraordinary and exceptional relation in which Knossos stood betimes to Egypt, though itself on the Northern shore of Crete, is already marked by the discovery on the site of a stone image of a typically prehistoric Egyptian type,¹ and by the remains of imported vessels of variegated stones including the base of a limestone 'gallipot' of late predynastic or early dynastic type in the sub-Neolithic house referred to above. From the overlying deposit above these transitional Stone Age foundations—dumped down as we have seen to the North-West of the site²—are a number of remains of Egyptian stone bowls, and other imported vessels of the same origin. The base of a porphyry bowl from this stratum shows a moulded base fitting on to the late pre-dynastic tradition, and contrasting with the flat-based fashion of the Early Dynasties (see Fig. 942 at end of Section). Others show reflections of proto-dynastic types, including a bowl of hornblende and porphyry³ which, in Professor Petrie's opinion, indicates a date not later than the Second Dynasty. Others, dating from the earliest historic period to the VIth Dynasty, amount, including fragments, to at least a score. It is, therefore, an outstanding phenomenon of the greatest interest that the proofs of early Egyptian contact supplied by these finds should be confined to Knossos⁴ and that no discovery of this nature has as yet come to light either in the Palace sites of Phaestos or Mallià or in any other part of the Island. The extraordinary richness of Knossos in this material, though situated on the Northern coast, can, indeed, itself be only explained by the very early existence of the overland route, already traced in the Second Volume of this Work to its Southern outlet at Komò on the Libyan Sea. Knossos itself was the port of departure for Mainland Greece.⁵

Some of these imported vases, like the table vessels, must evidently be regarded as gifts from the Pharaohs themselves or their high officials. Fragments, for instance, of shallow carinated bowls of beautifully translucent

¹ *P. of M.*, ii, Pt. I, p. 31, Fig. 13, *b*, where a similar image from Naqada is set beside it.

² This was done at the time of the foundation of the Palace to supply a *tabula rasa* for the Central Court and adjoining area West.

³ *P. of M.*, i, p. 67, Fig. 32. This vessel shows no trace of the usual 'roll' handles.

⁴ One was found in an Early Palace wall. (See A. E., *Knossos Report*, 1902 (*B. S. A.*,

viii), p. 121 seqq., and *P. of M.*, i, pp. 85, 86, and Figs. 54, and 55, *a*, *b*). The other fragments were from the early 'dumping area', N.W. of the Palace.

⁵ A few examples of Early Egyptian stone vases also reached Mainland Greece including Mycenae. Some of these may have been Minoan heirlooms, but they point eventually to early oversea traffic through Knossos.

diorite—fragments of quite a dozen of which occurred—are indistinguishable from those discovered in the tomb of King Sneferu of the IVth Dynasty (c. 2850–2820 B.C.). Such vessels may often have been preserved as heirlooms, but it is reasonable to suppose that their importation—especially when we have to deal with a whole series—dates from the epoch of their mass production in Egypt itself¹ The imitative forms afford even better proof.

Later on, in the Palace itself, we have hints of an even nearer, personal relation with the Pharaohs in the little diorite statue of User² found just outside the entrance to the later 'Throne Room' system in a

Middle
and New
Empire
con-
nexion

¹ A classification of the early stone vessels of Egypt has been recently drawn up by Dr. G. A. Reisner in his *Mycerinus* (Harvard University Press, 1931), p. 130 seqq., and he has also contributed to *Antiquity*, v (1931), p. 200 seqq., an article on Stone Vessels found in Crete and Babylonia. His great knowledge of the material, due so largely to his own excavations, makes this study specially valuable, and as regards proto-dynastic Egypt, I am glad to find that his results correspond generally with those set forth in this Work. It is the more to be regretted, therefore, that, as regards the prehistoric section (in which 'Dynasty O', as representing its most developed aspect, should be naturally included) not only is there a serious lacuna—the entire omission of the class of 'cupped bowls'—but a clear mis-statement of fact. In *Mycerinus*, p. 133, regarding the bases of the Middle and Late Prehistoric stone bowls it is stated that all the examples are of the round-bottomed type. But the flat base constantly occurs (e.g. *Naqada*, Pl. VIII, 1). The flat base with a moulded edge is found both on the smaller class of bowls (cf. Fig. 942, c, *Naqada*) and on miniature examples. Such moulded bases are, indeed, a feature of Middle and Late Prehistoric stone vessels in Egypt and disappear in Dynasty I. No proto-dynastic bowls of this kind exist. It was therefore reasonable to claim as an import from pre-dynastic Egypt the lower part of a porphyry bowl with a moulded base of an unusual

character (Fig. 942, a, b, c) found in the pre-palatial dumping ground N.-W. of the Palace at Knossos (*P. of M.*, ii, Pt. I, p. 59, and cf. p. 31). A small marble bowl, Fig. 942, c, from Naqada (Ashm. Mus.) shows a similar moulding. The same kind of porphyry, with somewhat elongated quartz crystals, occurs among prehistoric vases of the Petrie Collection in the University College Museum (40–60 sequence dating), as was kindly pointed out to me by Dr. M. A. Murray.

As explained above, the general indebtedness of Early Minoan forms to predynastic Egyptian models depends on a whole group of parallel objects found in the same early deposits—not only copies of stone vases, but stone palettes, similar idols, as well as features in costume (including a 'sheath' akin to the Libyan) fashions of hairdressing, and apparently the beehive form of their dwellings. All this is brushed aside by Dr. Reisner (*Antiquity*, *loc. cit.*, p. 206) with the aphorism that among primitive races 'similar needs and materials are apt to produce objects of similar appearance'. The fact is of course undoubted, but it is wholly inapplicable to the present case, relating to geographically and historically connected areas. The conclusion that under such conditions whole groups of parallel forms of marked individuality were independently evolved without any connexion with one another violates every law of probability.

² *P. of M.*, i, p. 286 seqq.

with
Crete
recalled.

M. M. II stratum. The alabastron lid, in turn, with the name of Khyan seems to imply relations with the great Hyksos King.¹

In the early part, again, of the Late Minoan Age, when Egyptian and Minoan influences were reciprocally reacting, the occurrence of alabaster pots of New Empire fabric as well as of their Cretan imitations becomes very frequent² and the fullest evidence of this is supplied by the contents of the Royal Tomb at Isopata.

Was there an Early Settlement from the Delta in Southern Crete? The 'Mediterranean' Skull Type.

The relationship, indeed, of the early inhabitants of Crete with the Southern Coastlands of Asia Minor should never be left out of account. The physiognomy of the earlier prince on the M. M. III seal impressions is itself typically Proto-Armenoid. The cult of the Double Axe itself came from that side.

But at the same time it must not be forgotten that an appreciable element in the population—*ab antiquo*—possessed skulls of the somewhat long-headed Mediterranean type, which also extended to the Libyan shore.³ The later physiognomy at Knossos itself—as well illustrated by the 'Cup-bearer' and other frescoes belonging to this class—agrees with this, and the solitary skull from the sepulchral chamber of the Temple Tomb itself shows a combination of the Armenoid with this Mediterranean type.⁴ From what has been said above, the reflection of a higher culture, the seat of which was in the Nile Valley, and which had already attained a brilliant development there before the days of the historic dynasties, was reaching Southern Crete and Knossos itself, at least as early and far more intensively than the remoter Oriental elements that seem to find their first impulse in the Western conquests of Sargon of Akkad.

Increasing
Egyptianiza-
tion of
late
Dynasty.

The intimate relations between Crete and Egypt were, as we see, continued under the earlier historic dynasties as well as throughout the Middle and New Empire. They are marked, moreover, by a deep-lying religious tradition from that side, to which the dual character of the Temple Tomb is itself a witness. The New Dynasty of Knossos, to judge from the strong influence of Egyptian models at this time visible in the Palace Art, seems to have strengthened its relations with the rulers of the New

¹ *P. of M.*, i, p. 419 seqq.

² A useful summary of the Egyptian finds on Minoan sites both of Crete and Mainland Greece is contained in Mr. J. D. S. Pendlebury's *Aegyptiaca*, Cambridge University

Press, 1930. This includes finds of both the earlier and the later stone vases.

³ Cf. *P. of M.*, i, p. 7, and note 2, and p. 8.

⁴ See below, p. 1010.

Empire : the repeated missions, indeed, of the Keftiu chieftains to Pharaoh's viziers strongly bear out this conclusion. It may be noted, indeed, as a symptom of political solidarity that the royal 'crook' symbol of the 'Shepherd of the People', as we see from the signary of Class B now introduced, was set beside the Minoan 'throne' sign. The centralized and bureaucratic régime of which the clay documents of this epoch give evidence and the autocratic rule to which they point is quite in keeping with this. Evidently the Priest-kings of Knossos in some sort regarded themselves as Pharaohs overseas. Is it too much to voice a suspicion that they may even have cherished pretensions to a lineage reaching back to kings before Mena? The presence of the 'cupped block' of old Nilotic and 'proto-Libyan' cult in the Temple Tomb is in any case a highly suggestive phenomenon.



FIG. 942, *a*, *b*, *c*. LOWER PART OF PORPHYRY BOWL SHOWING MOULDED BASE BELOW, OF A LATE PRE-DYNASTIC CLASS : FROM EARLY DUMPING GROUND N.W. OF THE PALACE. (SEE P. 984.)



FIG. 942 *d*. LOWER PART OF MARBLE BOWL, HIERAKONPOLIS.

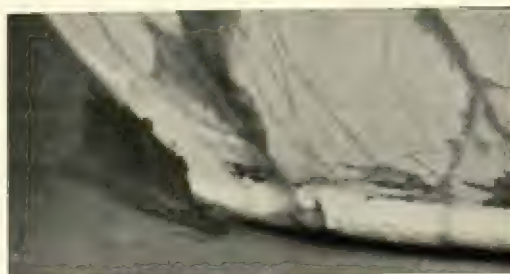


FIG. 942 *e*. SECTION OF LOWER PART OF BRECCIA BOWL, HIERAKONPOLIS (LATE PRE-DYNASTIC AS *d*.)

Traces of Catastrophe to Monument at end of L. M. Ia—evidence of Earthquake victims within Pillar Crypt—wholesale burial of remains there; Associated pottery L. M. Ia; Much rough rebuilding of structure at this epoch; Basement entrance hall and stairs to roof terrace—primitive key; Small Court with massive paving and verandah; Possibility of egress for Guardian from inner Staircase; Exterior connexions of Monument with 'High Priest's House' and, by the Great South Road, to Town and Palace; Entrance at N.E. corner and 'bridge' passage to roof of Pavilion; Paved Court in front of Pavilion suitable for ceremonial rites and sports—roof terrace vantage ground for spectators; Flower vases placed on roof terrace; Glimpses of formal Minoan flower garden from Harbour Town of Amnisos; Rock chamber re-used for burial; Pit with sepulchral relics; Ivory comb; Cylindrical alabaster vase; Large globular vessel of 'Palace Style' (L. M. II) with 'three C's' pattern; Group of miniature vases—child's toys; Human remains beside pit and entrance; Old man's skull of mixed Armenoid and 'Mediterranean' type and child's bones (explaining the toy vases); Skeletons originally on floor or in coffins; Pit for relics paralleled in 'Tomb of Tripod Hearth'; Incense burner or fumigator—ceremonial type with painted decoration; Its brilliant foliage typically L. M. II; Striated sprays as Tell-el-Amarna vase-painting, but of Knossian tradition, derived from palm-leaves; Traces of Snake Cult—small 'milk-jugs' on roof terrace identical with those of 'Snake Room'; Evidences of later memorial cult; Offertory vases, L. M. II–L. M. III a—no later sherds; Abrupt termination of memorial cult.

**Evidences of a Great Catastrophe towards the Close of L. M. Ia:
Remains of Earthquake Victims.**

Traces of
Cata-
strophe at
end of
L. M. Ia.

A later sepulture within the rock-cut chamber, full materials relating to which came to light, is best reserved for description in the concluding part of this Section. The occasion of the original plundering of this royal tomb is itself amply supplied by the widespread evidences of a great destruction suffered by the whole structure towards the close of the L. M. Ia Period.

Of the extent and the tragic nature of that catastrophe, a moving record has survived, immediately outside the rock-cut sepulchre itself, in

the rubble material interspersed with scattered human remains, heaped up within roughly built compartments that included the whole Southern section of the Pillar Crypt.

At first these were supposed to represent an intrusion of some practice of general sepulture within the building, carried out at intervals throughout some period of ruin. But a fuller survey of the evidence has revealed the true character of this tumultuary deposit. There is, in fact, every reason for concluding that the disposal of the whole material was carried out at one time, the date of the hurried clearance that it represents being clearly marked by the pottery found in the dumps, none of it later than the mature L. M. I *a* class itself, which was abundantly forthcoming.¹

Evidence
of Earth-
quake
victims
within
Pillar
Crypt.

A special significance attaches to the date thus marked. It corresponds with that of a considerable destruction in the Palace itself, best illustrated by the ruin that in a part of the Domestic Quarter entailed a radical change in plan, including the construction of the new 'East Stairs'. Of its seismic nature there can be little doubt. The analogy, moreover, supplied by the historic records of later earthquake ravages at Candia, the local successor of Knossos, would lead us to suppose that the periodical overthrows—serious shocks recurring about twice a century²—had resulted in large numbers of human victims.³ In that little town—then of well under 18,000 inhabitants—538 persons were killed during the earthquake of 1856, while in the more serious overthrow of 1810 the loss was estimated at 2,000. It is clear that, at each renewal after a seismic destruction, human remains were sedulously removed from within the Palace itself, and none were brought to light by the excavation. This seems also to have been the case with the private houses of Knossos. In the 'House of the Sacrificed Oxen'—as in that bordering on it, overwhelmed by blocks hurled from the Palace angle and destroyed at the same M. M. III *b* date—we find evidence of a ceremonial filling in. It was there marked by remains of the skulls of two slaughtered oxen—such as those 'in which the Earth-shaker doth delight'⁴—and, beside them, tripod altars of the hearth-shaped type. But in that case again there were no human bones.

¹ Mr. Pendlebury, who carefully examined the sherds, with the competent assistance of Mrs. Pendlebury, informs me that no single specimen came to light belonging to the immediately succeeding L. M. I *b* phase.

² The geologist, V. Raulin, *Description physique de l'Île de Crète*, i, p. 429, considers that, for a non-volcanic region, the district

about Candia may be regarded as the most earthquake-stricken in Europe. South of the watershed and West of Ida the liability is appreciably less.

³ See on this *P. of M.*, ii, Pt. I, pp. 313, 314.

⁴ Homer, *Il.* xx. 403 seqq. ἤμιν γὰρ ἡς ὄρε ταιῖος . . . γαίονταί δέ τε τοῖς ἑσπέρησιν.

Whole-sale burial of remains in part of pillar crypt.

But in a building, itself fundamentally of a sepulchral character, there was not the same motive for removing the remains of those who might have met their death in a catastrophe of this nature. The evidence before us demonstrates that such a destruction of the 'Temple Tomb' as originally built took place at the same L. M. I *a* date as that so clearly traceable in a section of the Palace. We may infer that in the covered parts of the building—the little Temple itself, the Pavilion opposite the basement entrance, and the Pillar Crypt within—devotees were gathered together at the actual moment of the overthrow in some memorial ceremony.¹

Associated pottery L. M. I *a*.

There being no elements among the fallen remains later than L. M. I *a*—to which almost the whole of the pottery found belonged—while the succeeding phase L. M. I *b* was otherwise well represented in the building, it would seem that a relatively short space of time had intervened between this catastrophe and the setting on foot of the work of clearance and restoration. The interval, perhaps, did not exceed the three years still required by Orthodox Greek usage in the Island before recently interred bodies can be transferred to the ossuary vault.

To facilitate this clearance, and at the same time to combine with it a kind of wholesale sepulture within the basement itself—the interval between the two pillars of the Crypt, and that between the Western pillar and the walls to West and South of it, were filled with a rough walling mostly formed of broken blocks. The character of this rough construction in part of the Eastern compartment, as cleared of its contents, is shown in Fig. 943 with the free passage-way left beyond for access to the entrance of the rock-tomb. The rest of the fallen materials—stones, rubble, clay, fragments of vessels, and human bones—was then heaped up into the spaces formed by these barriers.² No attempt at separate burial was made except that in one or two cases parts of the same skeleton were laid on the flat surface of schist slabs that had fallen from the roof terrace or, perhaps, the original floor of the Sanctuary Chamber directly above.

The bones themselves were in a much decayed condition, and may have belonged to at least a score of individuals.

¹ An episode may be recalled of the destructive Earthquake that occurred at Ragusa in 1667, when the upper part of the Palace of the Rectors was destroyed at the time when the Senate of that little Republic was assembling, and a third to the Senators together with the Rector were killed (Appen-

dini, *Antichità, Storia e Letteratura di Ragusa*, i, p. 321 seqq., and cf. *P. of M.*, ii, Pt. I, p. 322).

² No walling was found between the Eastern pillar and South Wall, the debris in this case being simply heaped into the part that was enclosed on three sides.

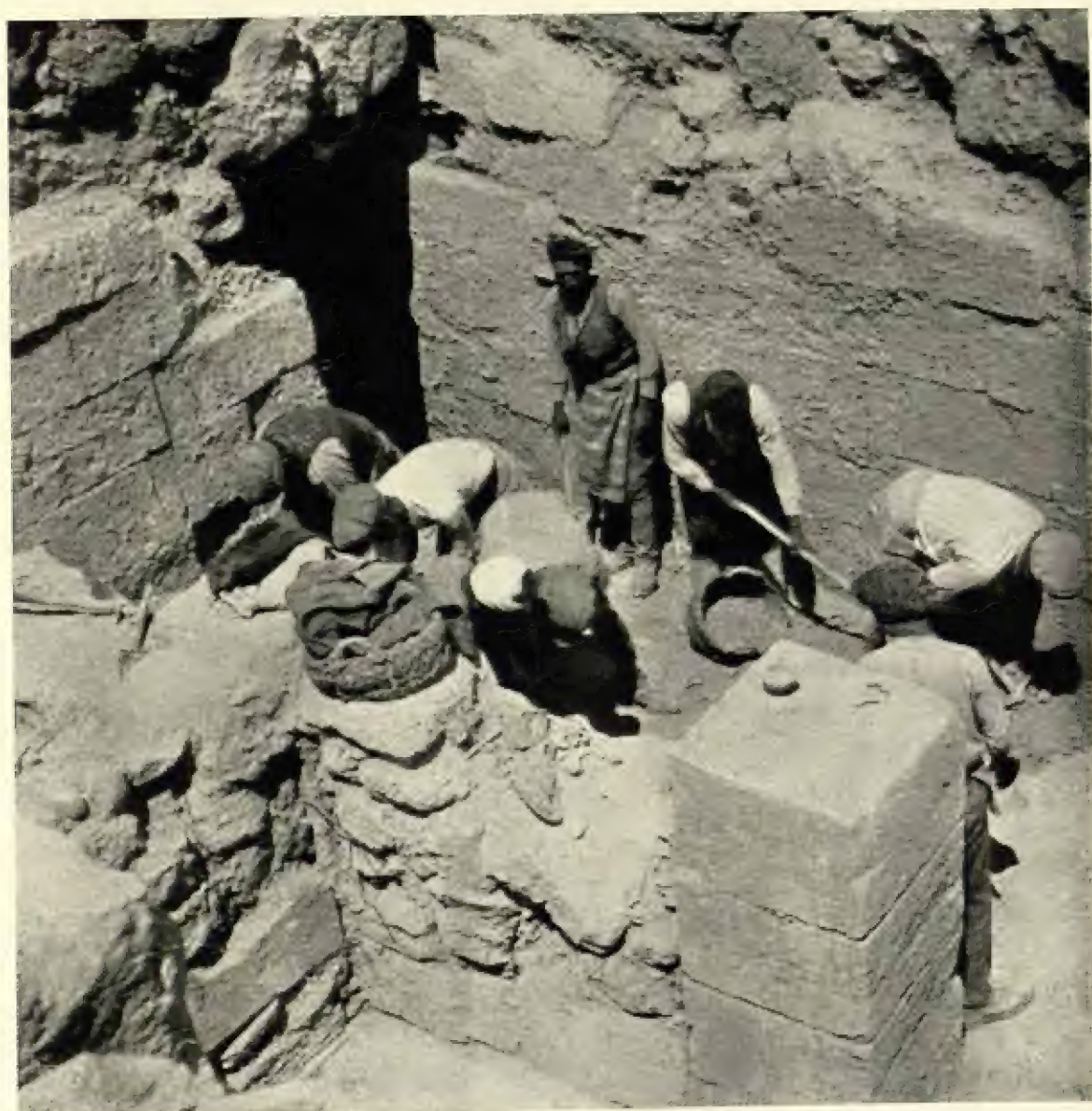


FIG. 943. PART OF EASTERN COMPARTMENT OF ROUGH WALLING BETWEEN PILLARS AND SOUTH WALL OF CRYPT, CLEARED OF ITS SEPULCHRAL CONTENTS. BEYOND IS AN OPEN SPACE LEFT FOR ACCESS TO THE ROCK CHAMBER.

Among the evidences of destruction afforded by the rough walling of the improvised partitions and the tumultuary deposit within these were broken blocks from walls and pillars, besides many slate fragments from the roof terrace and, probably, also from the original flooring of the Sanctuary

Much rough re-building of structure at this epoch.

Chamber above. Certain features in the basement structure as brought to light in its final shape pointed to a partial rearrangement. A conspicuous example of this is seen in the Northern entrance jamb, the re-use of which is shown by the socket that now appears on the inner face, but which was originally intended for an outer cross-bar. This is well illustrated in the view, Fig. 945, below, looking out from the 'Inner Hall' towards the paved Court and the restored Pavilion beyond it.

One of the main objects of the work of clearance, made possible by the construction of the rough partition walls between the pillars of the crypt, was to free the passage to the rock chamber beyond. Though now robbed of its rich contents, this was still the object of a memorial cult. That this was so is proved by the offertory vessels—covering not only the latest Palatial phase but a good deal of the succeeding Period—illustrated below, many of which were placed outside the entrance of the original sepulchral vault.

Entrance Hall and Stairs to Roof Terrace.

Entrance
hall and
stairs to
roof
terrace.

It is time, however, to turn from the Pillar Crypt—shown in Fig. 934 above, as now fully cleared out with its massive timbering partly replaced above—to the entrance system to the East of it.

This and the adjoining Sepulchral Chamber were approached from a little paved Court beyond by an Inner Hall (Fig. 945)—seen through the door opening in Fig. 934 above. This Inner Hall shows a pavement of irregular green schist slabs, and on its South Wall, raised a high step up, is a doorway with stone jambs, Fig. 944, opening on a landing pavement of similar slabs at the foot of a flight of limestone stairs.

This interior staircase consists of a lower series of seven steps and an upper flight of four, leading to an upper terrace level in its original state, paved entirely over with irregular slabs of the same green schist as those below. This material was well known to our workmen as still extracted from quarries at Rogdheà, West of Candia.¹

Small
Court
with
massive
paving
and ver-
andah.

Immediately beyond the doorway leading to this private staircase the Inner Hall was faced by its main entrance opening on a deep walled recess on the West side of the little interior Court. The photographic view of this entrance, Fig. 945, shows a restored column of the Verandah beyond the Court. It will be seen that the stone jamb to the left of the

¹ Some lacunas have been made up from this source.

doorway as well as that to the left of the nearer doorway leading from the Pillar Crypt have holes and perforations (see Fig. 947) corresponding with



FIG. 944. DOORWAY IN SOUTH WALL OF ENTRANCE HALL LEADING TO INTERIOR STAIRCASE.

those for bolt and lock, already illustrated by two doorways of the three-pillared basement of the 'South House'.¹ Subsequently, these features were illustrated by the discovery of the bronze locking-pin in the doorway of the passage, South of the North Lustral Basin.² In the present case another example of this Minoan form of key occurred in the Inner Hall (Fig. 946). Like that already found, it is of bronze with a blunt and pointed end.

Primitive
bronze
"locking
pin" or
key by
outer
door.

As was also noted with regard to the locking system of a Magazine, secured by the door leading into it from the South House Pillar Basement, difficult questions suggested themselves as to the control of the doorway concerned.

In that case the store-room was locked from within as well as from without, and it seemed to be a necessary inference that the little Magazine

had some trap-door communication with the more public room above.

The locking system of the Inner Hall of the Temple Tomb only secured it on the inside. As this has the appearance of being the only access from the exterior of the building, both to the Pillar Crypt and the sepulchral vault beyond, this seemed at first sight a surprising phenomenon, for, as the workmen sagely observed, 'the dead could not lock themselves in'. Was

¹ *P. of M.*, ii, Pt. I, pp. 382-4, and Figs. 217, 218, where Mr. Christian Doll's illuminating sketch and Section are reproduced.

² *Ib.*, iii, pp. 12, 13, and Fig. 6.

there then some means of access, such as a ladder and trap-door, from the Pillar Crypt to the Sanctuary Chamber above?

A more probable explanation seems to be offered by the doorway



FIG. 945. VIEW LOOKING OUT FROM INNER HALL ON PAVED COURT AND COLUMN OF RESTORED PAVILION BEYOND, SHOWING ENTRANCE JAMB WITH SOCKET FOR CROSS-BAR, RE-USED.

Possibility of egress for Guardian from inner staircase.

leading to the inner staircase and thus to the Roof Terrace, since from this open space three steps led up on one side to the door of the Little Temple, and on the other side by a descent of four steps to an exterior platform in connexion with the open entrance passage on the North border of the building. If, then, there was a door leading from the Roof Terrace to the inner staircase—a quite possible supposition—the Guardian of the Holy Place

might have made his way out by this means, securing the door from outside with one or more clay sealings. The hood of the upper flight of



FIG. 946. PRIMITIVE BRONZE KEY OR LOCKING-PIN FROM BASEMENT ENTRANCE.

the staircase where it reached the Roof Terrace level had been provided with some entrance doorway which could be thus secured.

The walled bay in the East façade of the basement section of the

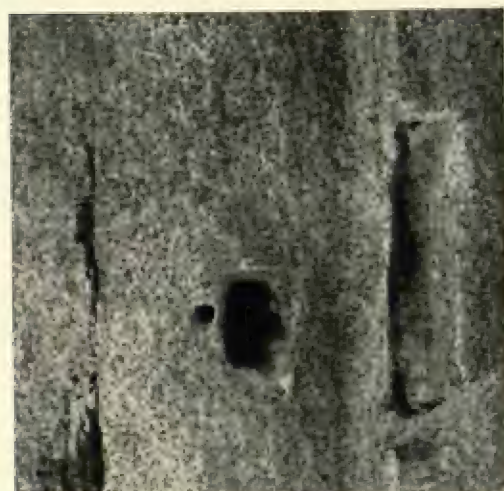


FIG. 947. SOCKET FOR INNER BAR IN GYPSUM JAMB, AND HOLE FOR LOCKING-PIN, WITH SOCKET FOR OUTER BAR BEYOND.

building, facing the small paved court, is shown in Figs. 948, 949,¹ the projecting bastions on either side having earth fillings and serving doubtless as vantage points for spectators on the Roof Terrace. The bay itself is raised by a low step above the level of the Court. The jambs and impost of the doorway are of gypsum, but the rest of the masonry is composed of limestone blocks, and it is noteworthy that—in contradistinction to those of the Pillar Crypt, which repeat the double-axe sign—there were still visible on several of these, in spite of the greater weathering, 'trident' signs,

Vantage ground for spectators above bay of E. façade.

parallel, though more finely cut, to those of the Northern Entrance Passage. In this case some reference has been suggested to the fact that the Passage itself stood in close relation to the neighbouring Sea Gate.

Outer Entrance System of Temple Tomb.

This sepulchral monument as a whole stood in very direct connexion with the main line of communication both as regards the Palace and the

Exterior connexions

¹ The upper part has been partly restored by the replacement of fallen blocks found near.

with
'High
Priest's

Harbour Town of Knossos beyond. A paved section of the Great South Road was in fact uncovered parallel with and a few metres below the



FIG. 948. WALLED BAY OF BASEMENT PORTAL, LEADING TO ENTRANCE HALL.

House
and by
bordering
'Great
South
Road'.

present high-road, which itself runs close behind the Pavilion that formed the Eastern border of this whole block. It has also been pointed out above that a narrower and more private line of paved road led directly from the 'High Priest's House' to a point in the main high-way approaching the North-East corner of the block composing the 'Temple Tomb' and its dependencies.

The evidence itself is clear that the exterior entrance to this sepulchral



FIG. 949. BIRD'S-EYE VIEW OF TEMPLE TOMB FROM NORTH-EAST.

area lay at this angle of the building. At this point a rock-cut platform is visible, from which twelve steps, also cut in the rock, led down to the lower entrance passage. The Southern side of this platform bordered an oblong

Entrance
to Temple
Tomb
from rock

platform
by N.E.
Corner.

paved area stepping up to the roof terrace, on the West side of which three steps led up to the columnar sanctuary, while, to the left, the interior staircase led down to the Inner Hall of the Pillar Crypt. (See plan, Fig. 950.)

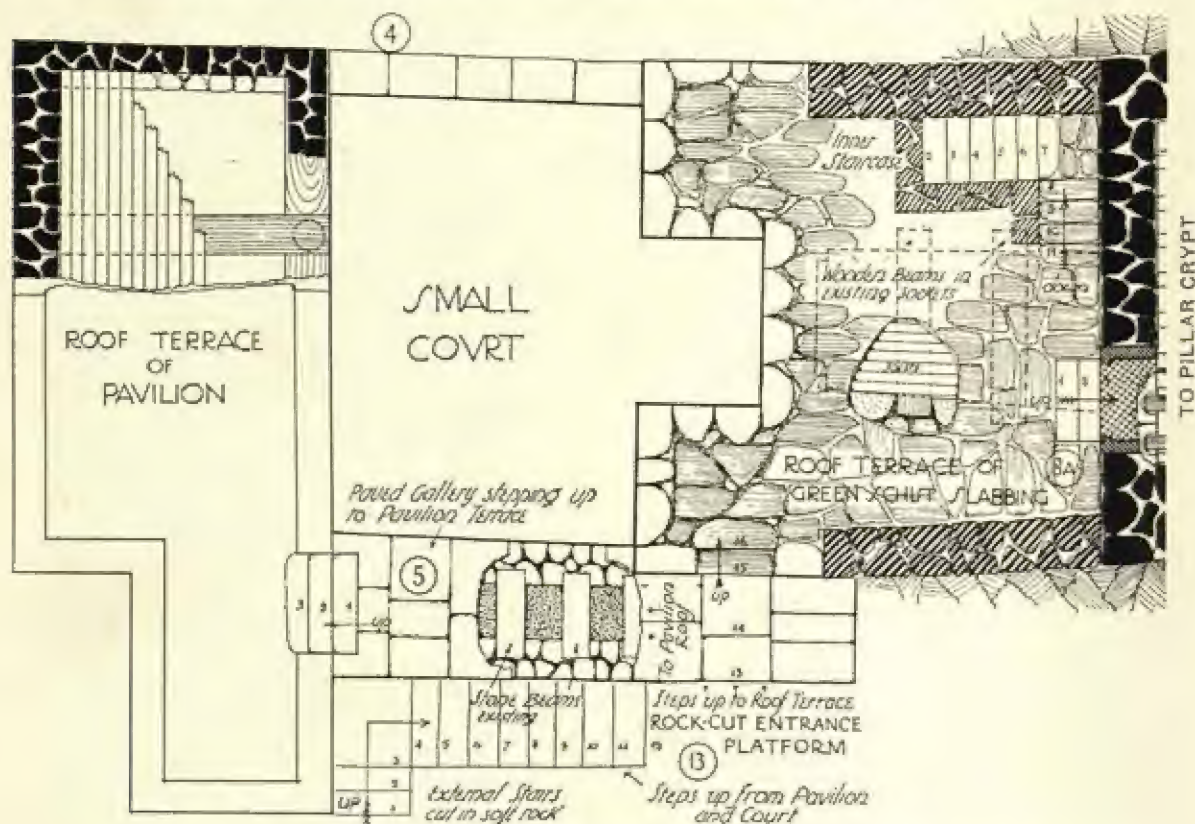


FIG. 950. EASTERN SECTION OF UPPER PLAN OF MONUMENT SHOWING ENTRANCE PLATFORM AND LINES OF ACCESS THENCE, ABOVE AND BELOW. (SEE COMPLETE PLAN IN POCKET AT END OF PART II OF THIS VOLUME.)

'Bridge'
from entrance
to roof of
Pavilion.

The entrance platform was at the same time prolonged East in a kind of paved Gallery forming a sort of bridge, stepping up to the roof of the Pavilion, which on that side looked out on the little Court. The Gallery itself was formed by two parallel wall-lines, with an earth filling between, the pavement being supported at intervals by short limestone beams (see Figs. 949, 951). The earth filling below these seems to have subsequently sunk leaving an open space at top, and this void was made apparent no doubt by damage to the roofing-slabs at the time of the L. M. Ia catastrophe. This space served in the later days of the Monument as a waste heap for masses of plain votive cups of the usual kind.

The convenient coign of vantage offered by this rock-cut entrance platform as a point of approach to the component parts of this monumental structure is well illustrated by Fig. 949, giving a bird's-eye view of the monument with the roof terrace and Sanctuary Chamber floor partially restored, taken (by means of a high scaffolding) above its North-East angle. The bridge with three of its limestone cross-slabs is seen in the right-hand corner, and in the foreground to the left of this part of the restored roofing of the Pavilion. Farther to the right, the entrance platform steps up to the basement roof terrace, which in turn leads by means of three more steps to the Sanctuary Chamber, where the sacral horns are visible.

The upper plan of this part of the building will be best understood by the extract given in Fig. 950 from Mr. de Jong's fuller Plan.¹ Rock-cut steps are visible, leading down to the entrance passage of the Pavilion.

Pavilion and Paved Internal Court.

To reach the basement section that seems specially to stand in relation to the sepulchral side of the cults, the devotee descended left from the Entrance Platform, by the rock steps indicated in the Plan, Fig. 950, reaching thus a short covered corridor by which was entered a Pavilion or *Stoa*, bordered to the West by a bicolumnar stylobate, terminating at both ends with massive square pillars composed of limestone blocks.² A view of this, looking East on the rocky steep beyond the Kairatos stream and its lateral gully, is seen in Fig. 951. It shows the columns and roof, as restored, together with the ascending steps (also replaced) of the 'bridge'.

The
Pavilion
and paved
internal
Court.

Of the internal decoration of the Hall only some red-faced stucco was preserved. A wooden bench, such as may have been set against the back wall, has been replaced there for the benefit of modern pilgrims.

This Pavilion extends the whole width, 6.20 metres, of the inner Court which it flanks on its Eastern side. The depth of this small Court, except for its central bay, approaching the entrance of the Inner Hall, is 4.30 metres, and it was bounded on both sides with walls of rough masonry.³ As shown by Fig. 952, it is paved with massive limestone blocks, the largest

¹ Given in pocket at end of Part II of this Volume.

² Many of the upper blocks had been displaced, but it was possible to replace most of them in position. Of the Pavilion itself a good deal of the Southern wall and a part of the adjoining section of the East wall was standing. The rest had been reduced to a

mere stump, and, towards the North, was only traceable by the foundations. This part is reconstructed.

³ At some later date, steps had been made in the South wall of the Court near that end of the Pavilion, running up South. (A record of these is preserved in the Ground-plan, Fig. 952.)

to be found in the whole building. There was no apparent remains of the original painted plaster that had doubtless filled the interstices of this.

It seems highly probable that this Inner Court may have been made



FIG. 951. THE PAVILION, AS RESTORED, SEEN FROM THE WEST, WITH 'BRIDGE' OF ACCESS TO ITS ROOF TERRACE ON THE LEFT. IN THE BACKGROUND APPEARS THE ROCKY STEEP BEYOND THE KAIRATOS STREAM WITH A GULLY TO RIGHT.

Presumed
scene of
ceremonial
rites and
sports.

use of for ceremonial rites and sports, both at the time of burials within the vault and on the occasion of memorial celebrations. It was well fitted for ring dances such as the *πηδητικὸς χορός*, which still survives in this Cretan region, and that with which, according to the Homeric Hymn, the train of Cretan youths followed Apollo of the Dolphin to his Delphic shrine, singing their native paeans. Still more fittingly, in view of the double sanctity of the monument, might the 'mazy dance' have been here performed, in honour of the Minoan Mother Goddess—the 'Aphroditè', whose shrine was recorded above the 'hidden tomb'—and whose epithet of the 'very holy' was to give birth at Knossos to the tales of Ariadnè. It is

EASTERN BASEMENT PLAN AND ENTRANCE SYSTEM 1001

also very probable that funeral games were held in this area, of the kind so well illustrated by the Minoan scenes of pugilists and wrestlers.

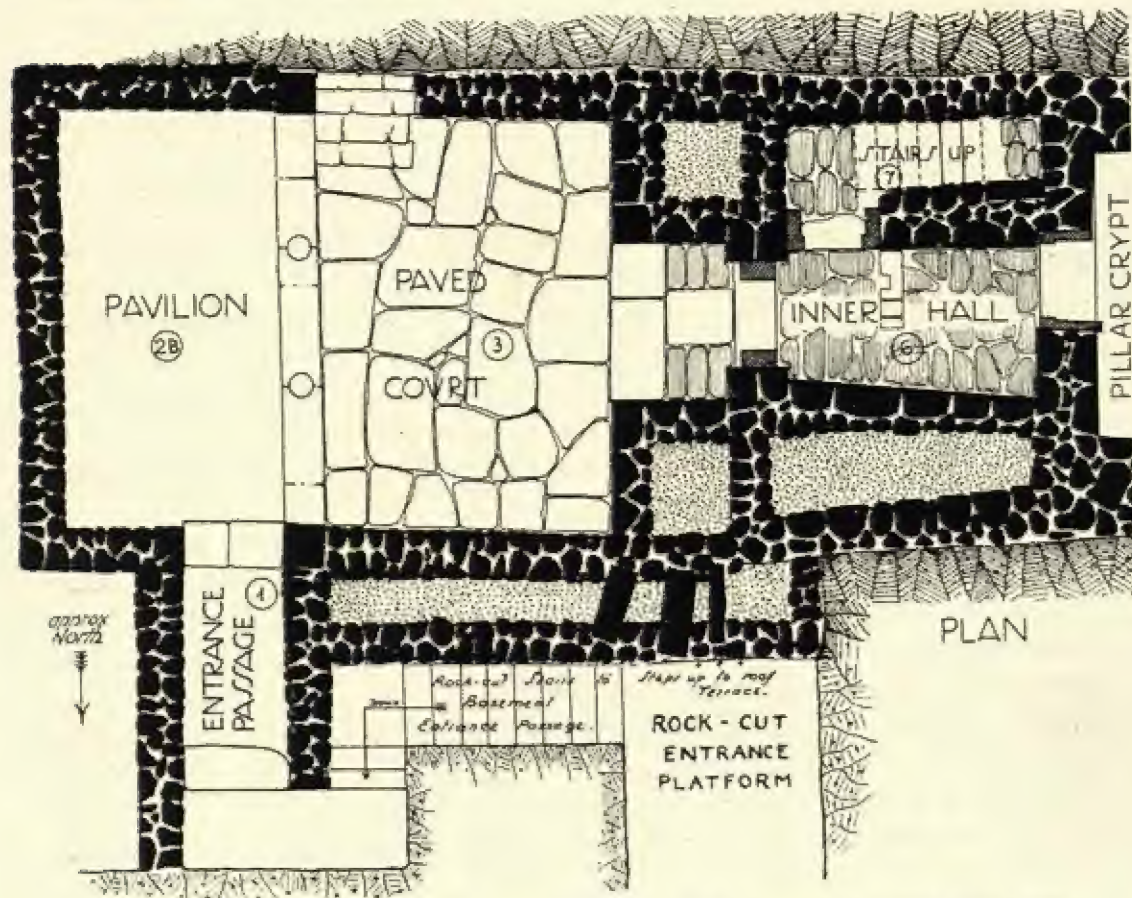


FIG. 952. EASTERN SECTION OF BASEMENT PLAN OF MONUMENT SHOWING ENTRANCE SYSTEM.

The Eastern basement section of the Monument is given in Fig. 952, showing the relation of this little Court to the Entrance system and surrounding buildings.¹

The Roof Terrace and its Floral Decoration.

For viewing such ceremonial performances the coigns of vantage supplied by the roof terraces over a large part of the basement section, as

¹ Mr. Piet de Jong's complete upper and lower Plan are contained in the pocket at end of Part II of this Volume.

The roof terrace a vantage ground for spectators.

well as that of the Pavilion itself and the platform, supplied the 'bridge' of approach to it North of the Court. The bastion-like projections of the flat basement roof with its green-schist paving were specially favourable to spectators, and in some respects recall the bastion overlooking the 'Theatral Area' of the Palace. A general idea of these terrace-levels surrounding the little Court may be gathered from the bird's-eye view already given (Fig. 949).

Flower-pot vases placed on roof terrace.

Of the manner in which this basement terrace was decked out in the early phase of the building, some interesting indications came to light. Principally on the border near the 'entrance platform' there appeared remains of a series of painted vessels of the 'flower-pot' class with perforations to their bases, and around them clumps of reeds or grasses in the L. M. I *a* style. Here, then, on the terrace-level—in front of the sanctuary chamber approached by it—bright flowers such as we see depicted in the frescoes were set out in the same manner as in the light-wells of the Palace itself.

Glimpses of formal Minoan flower garden on frescoes from Eastern harbour town. Discoveries of Dr. Marinatos.

Thanks to the fruitful researches of Dr. Marinatos in some fine mansions belonging to Amnisos, the Eastern haven of Minoan Knossos¹—below the Cave Sanctuary of Eileithyia—the fact is now well established that, by the M. M. III Period, broad flower stands on a much larger scale were employed for similar garden decoration. Those in the restored drawings, given, through his courtesy, in Suppl. Pl. LXVII *a*, recall and explain the stands resembling altar-bases, out of which the nursling palms spring in the inlaid design on a Vapheio Cup, and which, to a Minoan, would have had a sacral association. The companion piece, Suppl. Pl. LXVII *b*, shows a tall Madonna lily rising against what might be taken to be part of the polygonal plan of the borders of an artificial basin. Together with the conventional architectonic setting and the fountain-like shoots of the reeds and lily spray, they might suggest reminiscences of the gardens of Versailles.

Evidences of a Later Burial within the Rock-cut Vault: Shallow Pit with Funereal Relics.

In the second stage in the history of the 'Temple Tomb' that opens with its restoration after the Great Catastrophe of L. M. I *a*, its former Crypt, owing to the partition walls now built between the pillars, was reduced to a simple passage-way. It could no longer be convenient as a place

¹ Strabo, I. x, c. 4, 8: Μίνω δὲ φασιν ἐπινείῳ χρησασθαι τῷ Ἀμνισῷ, ὅπου τὸ τῆς Εἰλειθυίας ἱερόν.

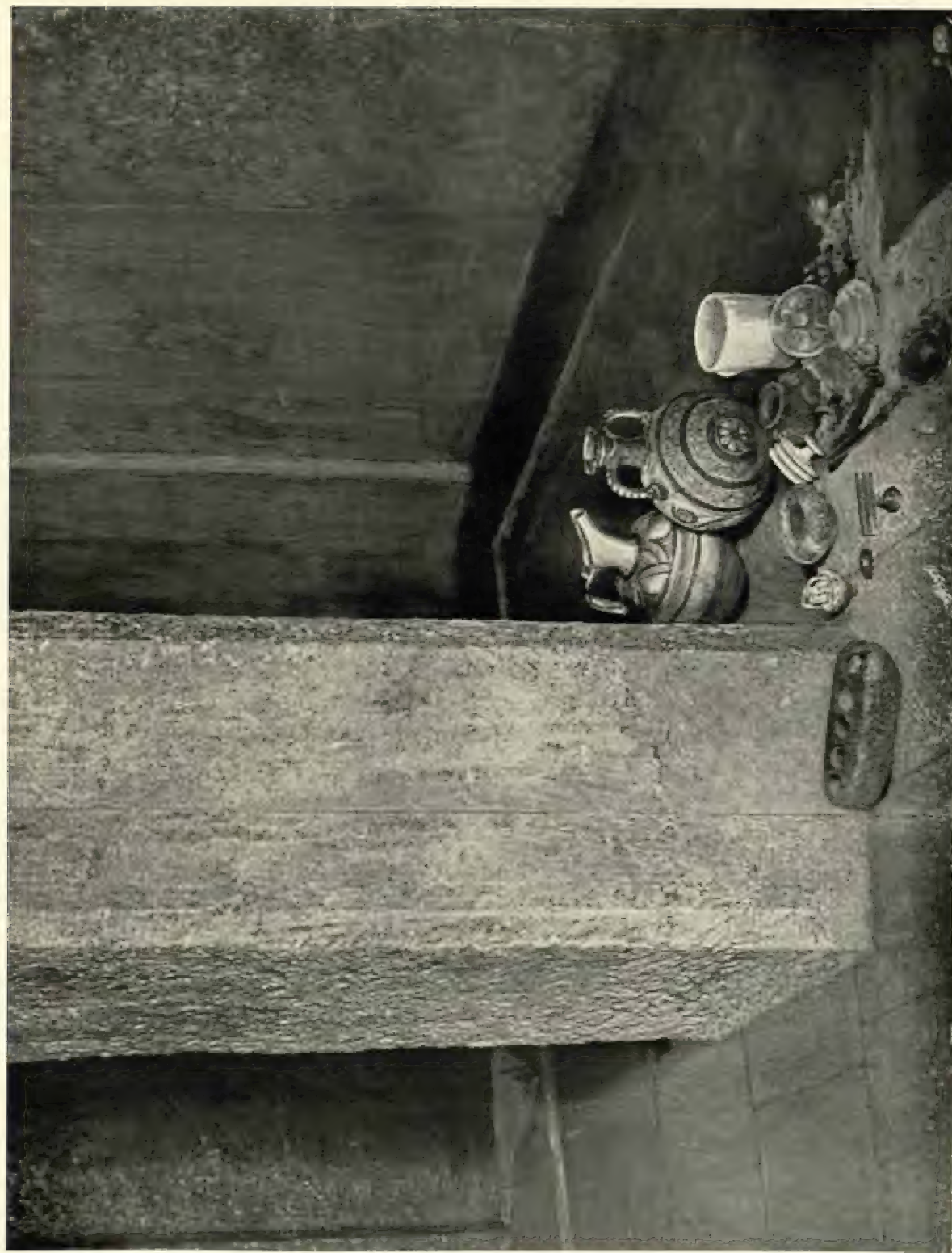


FIG. 953. VIEW SHOWING LOWER PART OF THE GYPSUM PILLAR IN ROCK CHAMBER AND, IN RIGHT CORNER, PIT FOR LATER SEPULCHRAL DEPOSIT WITH CONTENTS BESIDE IT. THE 'CUPPED BLOCK' IN CENTRE DID NOT BELONG TO THIS DEPOSIT.

for ritual functions. But the sepulchral chamber excavated in the original rock face beyond, and now apparently left open to votaries, supplied, as we have seen, an equivalent shrine for the same baetylic cult.

After an interval of time, however, marked in the building itself by

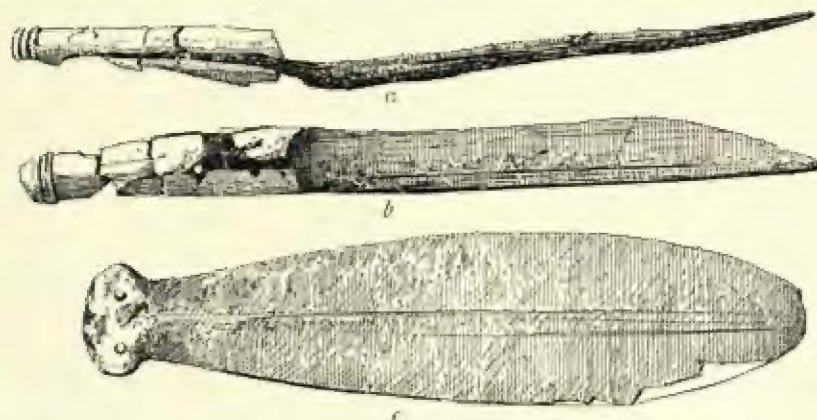


FIG. 954. BRONZE KNIFE WITH IVORY PLATES TO HANDLE *a*, *b*, AND RAZOR *c*: FROM SEPULCHRAL DEPOSIT. ($\frac{1}{2}$)

Rock
chamber
re-used
for burial.

the deposit of some good L. M. I *b* pottery,¹ this rock-cut inner pillar crypt was once more made to serve as a place of burial in addition to its ritual function.

Pit with
sepulchral
relics.

Near the corner of the vault, to the right of the entrance, was found a small pit some two and a half feet square and two feet deep, of which an angle is shown in Fig. 953,² containing what was clearly a deposit of relics in a sepulchral connexion.

These relics, which did not themselves include any human remains, had been a good deal disturbed, but they are shown in a collective form in Fig. 960. Of objects in precious metals, only a broken gold finger ring of light fabric was found, with its bezel wanting. Two bronze implements occurred, the knife (Fig. 954, *a*, *b*) of a usual Late Minoan form, with well-preserved ivory handle plates, and Fig. 954, *c* representing another common type, usually identified with a razor.

Ivory
Comb.

An ivory comb, Fig. 955, with the teeth broken off, recalls a class of objects already well known from Minoan tombs both of Crete and of

¹ A good example is supplied by the small 'hole-spouted' vase, Fig. 225, p. 290 above, with painted decoration including 'waz-lilies', stellate flowers, and an 'adder-mark' border.

² This figure also shows the 'cupped block', replaced at the foot of the central monolithic pillar.

Mainland Greece. The prominence in the middle of the back contains part of a curved foliate spray in relief. This rounded eminence is found again, on an ivory comb from the Spata tholos,¹ forming part of a rosette,



FIG. 955. IVORY COMB WITH CHEVRON AND FOLIATE DECORATION: FROM SEPULCHRAL DEPOSIT. (1)

which also recurs in a similar manner on another from the Sixth Stratum at Troy.² The plaitwork ornament which decorates the rest of the plate on the Trojan example is nearly related to the zigzagging pattern seen on that from the Temple Tomb. The curving sprays that form the central motive on this are more in sympathy with the most beautiful of all Minoan combs, that, of more or less contemporary date, from a house at Palaikastro, here reproduced in Fig. 956.³ The rounded prominence on the back here forms

¹ Haussoullier, *Bull. de Corr. Arch.*, 1878, p. 217, and Pl. XVII. The two zones of the comb show Sphinxes in relief. A fragment of another ivory comb, from the same beehive tomb, presents part of a waterfowl.

² Doerpfeld, *Troja und Ilion*, p. 399, Fig. 389. Another similar comb occurred at Mycenae. Several plain ivory combs were found in the Chamber Tombs, excavated by the British School at Mycenae under Dr. Wace's direction between 1920 and 1923. (See Wace, *Chamber Tombs of Mycenae*, *Archaeologia*, vol. lxxxii (1932), pp. 84 and 105, and cf. p. 210.) The much damaged gold comb found by Schliemann in a Shaft Grave at Mycenae—according to his account, in the

Women's Grave, No. III (*Mycenae*, p. 203)—is attributed by Karo (*Schachtgräber*, No. 310, p. 84, and cf. Pl. XLII) to Grave IV. Dr. Wace (p. 210) objects, indeed, that the former provenance is more probable, from its female associations. But the long-haired Minoan men needed combs as much as did the heathen Saxon warriors, who placed them in their graves. The razor in the present sepulchral deposit certainly points to a male owner, and the osteological evidence cited below also makes it probable that a man of mature age was interred here.

³ R. M. Dawkins, *B.S.A. Suppl. Paper 1*, *Palaikastro*, pp. 126, 127, and Fig. 108.

part of the gracefully interlocked coils of two lizards. The back of the comb here is broader with a reticulated pattern—a decorative adaptation of

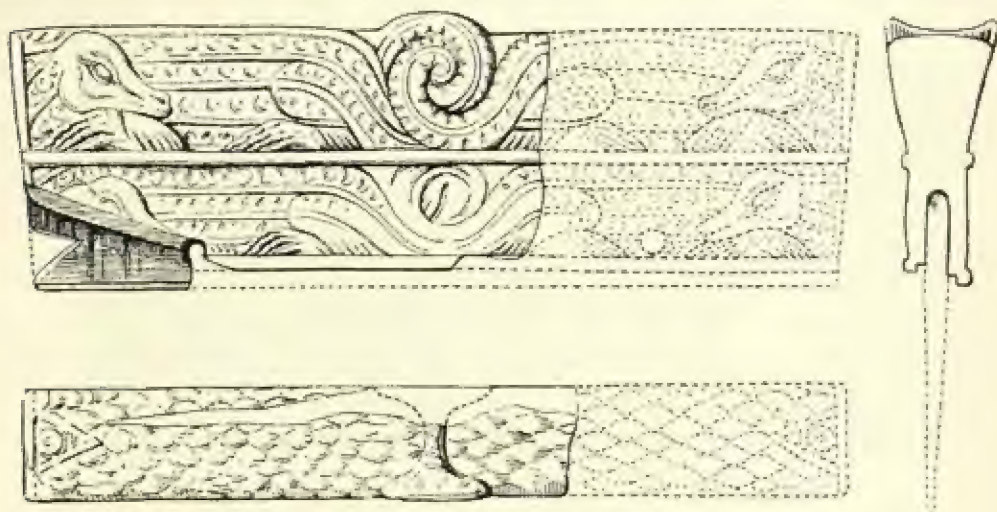


FIG. 956. IVORY COMB WITH TWO INTERLOCKED LIZARDS, FROM PALAIKASTRO (SLIGHTLY ENLARGED).

the lizards' scales. In this case the teeth did not, as in Fig. 955, form part of the plate, but were fitted into a groove.

This object supplies a singular illustration of the inventive skill of Minoan artists. For the choice of the twin interlocked lizards was clearly due to the special adaptability of their coiled tails to the rounded central projection usual in the back of these combs.

The cylindrical alabaster vessel, Fig. 960,¹ the surface of which had suffered greatly²—has three handles resembling Minoan 8-shaped shields, and identical in fabric with those of the *alabastra* which, in the 'Room of the Throne', had served in the preparations of an anointing ceremony, never to be carried out. It was provided with a cover showing a large knob in the centre of an elegant rosette pattern in relief, Fig. 957. The small pedestalled vase of alabaster beside it, Fig. 958, resembles a common XVIIIth Dynasty Egyptian shape.³ The 'bird's nest' bowl of serpentine and the lid of another, though in Egypt they go back to IVth Dynasty prototypes, were long imitated in Late Minoan Crete.

Of the pottery, the most outstanding specimen is the large globular flask

¹ In Fig. 960 it is a good deal restored. The lid is duplicated, to show its face.

² E.g. Von Bissing, *Steingefässe*, Pl. VII, 18218.

or ewer, Fig. 959, already reproduced above,¹ since it presents on its upper surface the 'three C's' motive typical of the L. M. II 'Palace Style' in an advanced evolutionary stage. An ewer—shown behind this, by the central

Large globular vessel of 'Palace Style' with three C's' pattern.

pillar, in Fig. 953—is indistinguishable in style from L. M. III *a*, but, as there is no evidence that it had been buried, it may possibly be an intrusion from the vessels belonging to the later memorial cult found outside the entrance of the rock chamber.

We are in any case entitled to infer from the mature form of the 'three C's' motive on the globular flask, Fig. 959, that the deposit as a whole must be referred to the closing phase of the Palatial Age.

The polychrome incense-burner *d*, described below, certainly belongs to the floor deposit



FIG. 957. COVER OF CYLINDRICAL ALABASTER VASE. (c. $\frac{1}{2}$)

as also the parallel specimen found with it (Fig. 962, top).

An interesting feature noticeable among the vessels of this deposit is

the occurrence of a miniature group. The diminutive size of three of these strikes the eye on Fig. 960 as compared with the large globular flask beside them. Of the first of these, to the left of the Figure, a very small spouted ewer, only the upper part has been preserved. The second is a dwarf stirrup-vase (c. 7 cm. high), the decoration on which shows a close analogy to that of the larger vessel behind it. To the right of this is a small dark-faced vase of a somewhat bottle-shaped type only 28 millimetres high ($1\frac{1}{8}$ inch). These last two vessels and

Group of miniature vases—a child's toys.



FIG. 958. PEDESTALLED ALABASTER VASE OF EGYPTIAN TYPE.

another that had apparently belonged to the deposit are shown in Fig. 961 about their natural size. More than this, the pedestalled vase of

¹ See above, pp. 353, 354, and Fig. 297, *a* 1, 2.



FIG. 959. LARGE GLOBULAR FLASK OF L. M. II PALACE STYLE: SIDE VIEW. SEPULCHRAL DEPOSIT (40 CM. HIGH).

alabaster, and the 'bird's-nest' serpentine bowl, of which the very small lid appears near it in Fig. 960 (*h*), also belong to this miniature class.

That these 'toy' vessels are such as were buried with children is well established by the contents of a L. M. III *a* chamber tomb (No. 99) of the Zafer Papoura Cemetery. A group of seven of these was there brought to light, beside larger vases, in company with remains of two adult skeletons—presumably man and wife—and a child five or six years of age. Five of the small vessels in that case were stirrup-vases.¹

It will be seen that the conclusion that this funereal deposit had reference to a child as well as to an adult buried here, curiously corresponds with the evidence afforded by some human re-

mains that came to light on the floor-level just outside the entrance to the rock chamber.

Human Remains connected with Deposit.

Human remains beside pit, but mostly by entrance.

Of human remains in actual relation to the pit only two or three fragments occurred on the surface level in the adjoining corner of the vault. Just outside its entrance, however, there lay on the floor-level part of a skull, together with a small heap of bones. These, from their position, could have had no connexion with the mortuary deposit within the roughly

¹ A. E., *Prehistoric Tombs of Knossos*, i (*Archaeologia*, vol. lix, Pt. II), pp. 487-9, Figs. 99, 100.



FIG. 960. GROUP OF VASES AND OTHER RELICS FROM LATER SEPULCHRAL DEPOSIT.

walled partition described above, that had been formed on the South section of the Pillar Crypt, and it is reasonable to suppose that they belonged to the same late burial within the inner vault itself as the fragmentary bones found on the same level beside the pit containing the relics.

The bones proved to consist of the greater part of a skull, and some bones of an adult man together with one or two belonging to a child.



FIG. 961. MINIATURE VASES (CHILDREN'S TOYS) FROM SEPULCHRAL DEPOSIT: NATURAL SIZE.

Old man's skull of mixed Armenoid and 'Mediterranean' type and child's bones, recalling the toy vases.

Dr. L. H. Dudley Buxton, who kindly examined them for me, reports that the adult remains 'belonged to an elderly man, though of athletic training, and the skull exactly corresponds with other skulls from the same Cretan region. It probably represents an admixture of the "Mediterranean" with the "Armenoid" type, the characters of the former predominating.'¹

What, moreover, is of special interest, in view of the toy vases found in the shallow pit, is the fact that one or two fragmentary bones belonged to a young child. In this case it seems evident, however, that the relationship was different from that illustrated by the Zafer Papoura Tomb above referred to. There we have clearly to deal with parents and child. In this last interment of the Temple Tomb the advanced age of the male

¹ Dr. Buxton further observes: 'He must have eaten pretty hard tack at some long period of his career, as the teeth are well worn, which does not occur without a hard diet. A hard diet in the physical sense, not necessary

cultural, probably due to the type of bread they ate. One finds similar wear on the teeth of the people of Kish, at the height of their glory.' The lower jaw was wanting.

skeleton suggests that it represented the grandfather rather than the father of the young child.

'Incense-burners' or Ritual Fumigators placed on Floor of Tomb.

It may be supposed that the remains of these two individuals had been either simply laid—as in many other cases—on the floor of the sepulchral chamber or possibly enclosed together in a wooden coffin.

Skeletons originally on floor or in coffins.

The deposition of the *peculium* of the dead in a shallow pit can itself be paralleled by other instances, one of which occurred in the 'Tomb of the Tripod Hearth' at Zafer Papoura.

Pit for relics paralleled by 'Tomb of Tripod Hearth'.

In addition to this, however, it seems clear that in the present case certain vessels found outside the actual cavity on the floor-level had from the first been destined for that position. This refers especially to two vessels of a well-known sepulchral class, which in this connexion may be best described as 'incense-burners' or 'fumigators'. The larger of these exactly corresponds with one that still contained the charcoal from the Chamber Tomb, No. 32, at Zafer Papoura¹; and which was associated with L. M. III *a* pottery. Two others, again, closely resembling this occurred in the built tomb, No. 1 at Isopata,² where the ceramic association was of an advanced L. M. II type. One of the vessels in this case contained not only remains of charcoal, but, with it, pieces of pure resin in a decayed condition.³ Enough remained, however, to give a resinous smell when burnt, and there can be no doubt that, blended perhaps with other odorous substances, this had been used for the ritual fumigation of the burial chamber.

'Incense-burners' or 'fumigators'.

The vessels from the 'Temple Tomb', however, though of the same type, were representative of the further ceremonial stage from which the actual burning was excluded. Like a specimen from Hagia Triada, they were both covered with an imperfectly fixed coloured decoration, found on vases of various forms in the Knossos cemeteries⁴ and elsewhere, and entirely dedicated to funereal use.

Incense-burners of ceremonial type, with painted decoration.

Of the two ceremonial 'incense-burners' thus set out in connexion with

¹ A. E., *The Prehistoric Tombs of Knossos* (Quaritch, 1906), p. 49, Fig. 46 (*Archaeologia*, vol. lix, p. 439).

² A. E., *Tomb of the Double Axes, &c.* (Quaritch, 1914), p. 13, Fig. 18 (*Archaeologia*, lxx).

³ Professor Otto Olshausen (who kindly examined a fragment of the material at the time)

informed me that it was reduced to the condition of a kind of natural *colophonium*, from which the oil of turpentine had mostly disappeared, though enough remained to give a resinous smell when burnt.

⁴ Good examples are supplied by the L. M. I polychrome goblets from Tomb 5 at Isopata (*op. cit.*, Pl. IV, see p. 26 seqq.)

the later burial within the rock vault, the smaller (Fig. 962, top) shows traces apparently of floral designs¹ on the white ground wash of its exterior.



FIG. 962. INCENSE-BURNERS WITH POLYCHROME DECORATION: ON FLOOR OF ROCK CHAMBER BESIDE PIT. (c. $\frac{1}{2}$)

Brilliant
foliate
decora-
tion on
incense-
burner
typically
L. M. II.
Striated
reed

The larger and more stately example (Fig. 962 below), which was about 6 inches (15 centimetres) in height, displayed at the time of the discovery, both inside and out, a scheme of foliate decoration, the brilliant hues of which, as taken down by me in colours at the time of the discovery, are reproduced in the Coloured Plate XXXV, though they have since a good deal faded.

It will be seen that the sprays, here repeated in brilliant tints of blue, yellow, and vermilion, reproduce the characteristic striated reed foliage that

¹ Facing, rosette-like flowers may be made out (compare the floral sprays with butterfly, Fig. 966 below).



a and *b* 1, 2, CEREMONIAL INCENSE BURNER, FROM ROCK-CUT BURIAL VAULT OF TEMPLE TOMB. *c*, SIMILAR STRIATED SPRAYS, KNOSSOS; *d*, TELL-EL-AMARNA



we find associated with the thickets behind the Griffin Fresco (Pl. XXXV, *c*) and, again, beside the Argonaut in another contemporary frieze, also referred to the latest Palatial epoch.

sprays paralleled by Tell-el-Amarna vase painting.



FIG. 963. FAIENCE SPRAY WITH LILY-LIKE FLOWER AND STRIATED FOLIAGE, SUGGESTED BY PALM LEAVES: TEMPLE REPOSITORY, KNOSSOS.

The same characteristic feature recurs on jars of the 'Palace Style' and in remains of the Mycenae wall-paintings (Suppl. Pl. LXVI, *c* 1, 2) that attest the supremacy there of Knossos, at least in artistic fashion, at this time.

What is particularly interesting to note is that a closely parallel vegetable type with a similar colour scheme appears on pottery from Akhenaten's Palace at Tell-el-Amarna, dating from the beginning of the second quarter of the Fourteenth Century B.C. In the same zone in Coloured Pl. XXXV, *d*¹ it is coupled with the forepart of a bovine animal, which recalls the cattle sporting on the Nile-side meadows of the pavement there uncovered.

The Egyptian element in these sprays, as here displayed by the papyrus tuft, above them on the Plate, and, again, in the 'Room of the Throne' at Knossos, cannot be called in question.

But the striated leaves themselves are not Egyptian. They are derived from a rendering of palm-leaves that already appears in the polychrome designs of M. M. II *a* vases.² They are taken over, somewhat later, as a conventional decoration of the plant-forms of composite character (Fig. 963) that were found, modelled in Knossian faience, in the 'Temple Repositories'.

This striated foliage Knossian derivation from palm-leaves.

¹ From part of a large painted pot in the Ashmolean Museum.

² E.g. on the early 'Ostrich-egg rhyton', *P. of M.*, i, Fig. 436 C, opp. p. 594.

belonging to the closing phase of the Third Middle Minoan Period. In that case a branch with leaves thus striated is combined with a highly artificial flower—of lily-like appearance—the petals of which repeat the striations of the leaves in the same pale green and brownish tints¹. The Tell-el-Amarna spray of Pl. XXXV, *d*, reflects this Minoan tradition.

It was doubtless believed that the brilliant hues of the incense vessel—like the heavenly blue of the 'window' openings in the timbered ceiling above—were a visible source of pleasure to the dead, despite the pervading gloom. The bright colouring of the interior of the recipient was itself a proof that it was not intended for actual use, though, in the Spirit World, fumes sweet as those of incense might be diffused from it.

Evidences of Snake Cult in connexion with Temple Tomb—Ritual 'Milk Jugs': the Goddess as 'House-Mother'.

Evidence
of Snake
Cult:
small
vessels on
roof
terrace
identical
with those
of 'Snake
Room'.

The dark, subterranean chamber with its central pier must, as already observed,² be regarded as itself a shrine of the Goddess. As in the case of other pillar crypts it would naturally connect itself with the Goddess on her dread chthonic side, the little Temple above the ground and free to the light of day being representative of her celestial being. But the last funeral rites, of which we have the evidence in the mortal remains and relics before us, were in any case mainly inspired by the idea of placing the dead under the protection of the Great Mother of a simpler household cult.

The characteristic aspect of the Goddess as 'house-mother' has been shown in the first Part of this Volume³ to have been intimately bound up in Minoan Crete with the widespread cult of domestic snakes as representing the actual spirits of departed members of the household. The cult of the domestic snakes has indeed received an illustration, unexampled in its completeness, in the actual 'Snake Room' with its full furnishment, near the West wall of the Palace.

Amongst the smaller vessels, in this case specially designed for feeding the snakes, several specimens occurred of plain, miniature jugs, about 8 centimetres ($3\frac{1}{8}$ inches) in height, the original looped upright handles of which, springing behind from the rim, had in both cases only survived in a rudimentary form.⁴ From their association with the nourishment of the household snakes we may reasonably regard them as 'milk jugs'.

It is therefore of great interest to record that, along the Eastern border

¹ See *P. of M.*, i, p. 500. Fig. 358 is here repeated in Fig. 963.

² See above, p. 977. ³ See Pt. I, § 94.

⁴ Examples of these, slightly variant in the shape of the body, are given in Pt. I, Fig. 109, 18-22..

of the roof terrace of the Temple Tomb, numerous small jugs of the same shape and characteristic fabric (Fig. 964), with atrophied handles, came to light, which we must naturally suppose had served the same purpose as those of the Snake Room. In both cases they probably contained offerings of milk, such as are still made to the household snakes throughout the Balkan countries and elsewhere. We may conclude that perhaps in the Southernmost section of the Terrace area there was some kind of enclosure within which the reptiles were fed and tended by votaries visiting the Monument.



FIG. 964 'MILK JUGS' WITH RUDIMENTARY HANDLES, SUCH AS WERE USED FOR FEEDING HOUSEHOLD SNAKES. FROM ROOF TERRACE OF TEMPLE TOMB.

Evidences of a Later Memorial Cult.

It is clear that the late burial and associated deposit within the vault above described has no outward semblance of a royal interment. The ceramic evidence which brings it down to the very close of L. M. II has suggested that it may belong to the epoch immediately succeeding the final catastrophe of the Palace itself. An elderly man and a child are in themselves not so naturally associated, and the question remains why these individuals and these alone should have been buried thus, at this late date, in what we can only regard as an historic vault of Priest-kings of Knossos.

If we assume that they were placed here after the final overthrow, a certain poverty in the associated *peculium* might well explain itself. That some precious and perhaps distinctive relics had been abstracted is also

Evi-
dences
of later,
Memorial
Cult.

highly probable. On the whole it seems natural to infer that the persons of whom the relics found had once been the property, were placed in this historic vault as having themselves belonged in some degree to the House of Minos. There is, indeed, a reasonable possibility that—like the scattered bones in the promiscuous heap in the neighbouring enclosure of an earlier date, stricken by the earlier catastrophe—these may have been among the victims of the seismic ruin that closed the Palace story.

That this late interment was, in fact, regarded with a special piety is shown by the evidence of a votive cult beginning at this epoch and continuing to the last days of Minoan Knossos.

Offertory
vases
L. M.
III *a*: a
few late
L. M. II.

This memorial cult was marked by the occurrence of a series of offertory vases dated by their style from the closing phase of L. M. II to that of L. M. III *a*. These occurred in two main groups, by the Entrance Platform leading to the building as a whole, and outside the entrance of the inner sepulchral chamber itself, on the floor of the space left open as a gangway along the North section of the Pillar Crypt.

These vessels principally consisted of pedestalled goblets with two handles, stemless bowls also two-handled, cups, and stemmed goblets. The latter class, though in a somewhat later style, especially recalled those of which remains were so abundantly forthcoming on the outskirts of what seems to have been a late Sanctuary Hall in the South-West Palace Angle (see Fig. 306 above).¹ The vessels there found, however, go back in some cases to an L. M. I *b* date, nor do any of them overpass the chronological limits of the Palace itself.

Together with the bowls and stemmed goblets of the present deposit, there were also 'hydrias' or 'kraters' of the type presenting two broad handles that spring vertically from the rim (Fig. 965, *k*, *p*)—a class which has been derived from the fine bronze vessels of similar form.² The religious use of them is in that case marked by the figures that they bear of libation-pouring Minoan Genii.³

Some of these vases, as for instance the stemmed goblets *g* and *h*, may still be placed within the later limits of L. M. II, represented by the sepulchral group within the tomb. Others, however—including the 'kraters' *k* and *p*—clearly belong to the succeeding L. M. III *a* phase, in some cases (as *p*) to its most mature form.

Con-
siderable
duration
of memor-
ial cult.

We have here evidence that the funereal ritual illustrated by these votive vessels continued to be observed for a considerable space of time after

¹ See above, p. 368.

² See above, p. 311, Figs. 245, 246.

³ See above, pp. 454, 455, and cf. vol. ii, Pt. II, pp. 652-4.

the final catastrophe of the Great Palace. Already there are marks of progressive artistic decadence, but the old traditions remained unbroken. The



FIG. 965. 'KRATERS', BOWLS, AND STEMMED GOBLETS FROM 'TEMPLE TOMB', BELONGING TO LATE MEMORIAL CULT.

'Temple Tomb' of the old Priest-kings was still a centre of a memorial cult. In no part of this sepulchral sanctuary were there brought to light sherds of later date than the final stage of the Third Late Minoan Period hardly beyond the earlier phase. The memorial cult was abruptly broken off, and the negative evidence may be taken to show conclusively that within the first half, at most, of the Thirteenth Century before our era the site had become entirely deserted.

No later sherds than L.M. III_a found in monument: abrupt termination of cult.

Site just
missed by
'Geomet-
rical'
grave.

To the Achaean invaders, as to the later Greeks, it seems to have been unknown, since no Geometrical sherds had intruded themselves within. They missed it, indeed, by only a few feet, for, almost immediately, beyond the North-West Corner of the Monument, there had been dug a Late Geometrical grave pit containing vessels of characteristic types. Had they been aware of the existence of the elaborate basement system or penetrated to the rock-cut chamber there can be little doubt that they would have made use of them as they did of other Minoan vaults.

In the 'Whirligig of Time', however, it was ordained that this resting-place of old Priest-kings should not thus be reoccupied by the new-comers. Its structures, so skilfully combined to suit the needs of celestial and of heroic worship, survived alike the tragic interlude of ruin wrought by the Powers below and the succeeding epoch of re-use when they once more offered hospitality to the honoured dead and had become the scene of memorial services. To-day, as re-discovered, thanks to a child's chance find, they still preserve—after the lapse of some thirty-three centuries—to a quite extraordinary degree the essential features of their original arrangement.

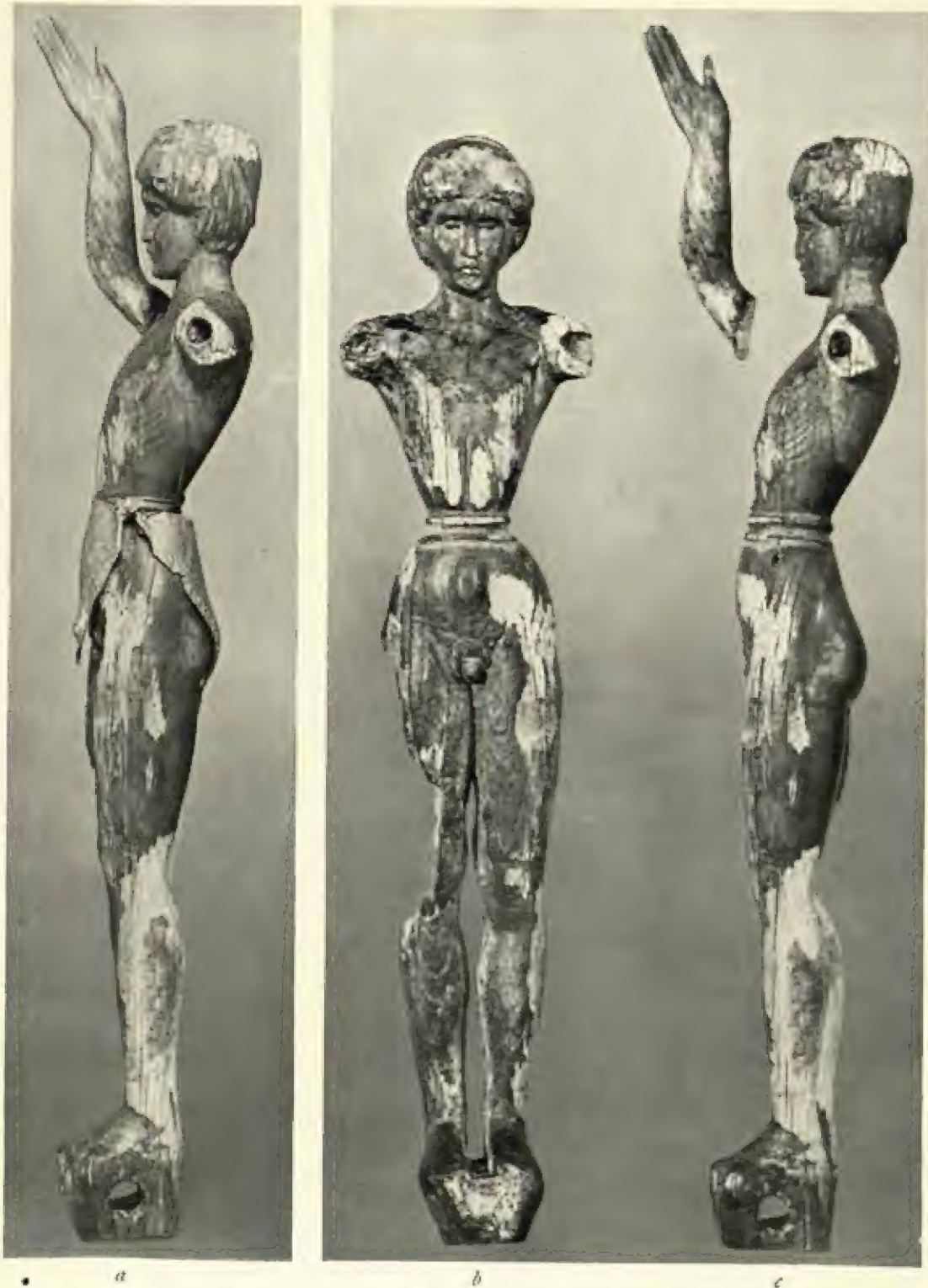
A votary of the old cult, were he restored to the upper air, might well claim that it was simply and solely due to the magic power of the 'Ring of Minos', with its varied record of his divine patroness as Lady of the Sea, that this monument of ancient piety owes its rescue from the long Night of Man's forgetfulness.



FIG. 966. LIFE IN THE AIR, ON SEA, AND LAND: FLYING BIRD, ARGONAUT 'SAILING', AND BUTTERFLY FLUTTERING ABOVE FLOWER (A MINOAN 'LITTLE SOUL' AND EMBLEM OF RESURGENCE). HAKMATITE LENTOID DATING FROM THE EARLIEST PHASE OF THE LATEST PALATIAL PERIOD (L. M. I δ). FROM NORTH OF PALACE SITE, KNOSSOS.

SUPPLEMENTARY PLATES





CHRYSELEPHANTINE FIGURE OF BOY-GOD: *a*, PROFILE VIEW WITH PLATES OF GOLD LOINCLOTHING ATTACHED; *b*, FRONT VIEW OF IVORY FIGURE WITHOUT PLATES; *c*, PROFILE VIEW WITHOUT GOLD PLATES. (See p. 468 seqq.)



Position
of
Cross-wall

VIEW OF SOUTH END OF LOWER 'LONG CORRIDOR', SHOWING POSITION OF CROSS-WALL CONSTRUCTED IN M. M. III
SHUTTING OFF MAGAZINES T-3, BUT SUBSEQUENTLY REMOVED. THE PAVEMENT ENDS AT THIS POINT.
(See p. 630 seqq., and cf. p. 621, Fig. 606.)



a. *PITHOS* FROM MAGAZINE IX
OF 'BOTTLE-SHAPED' TYPE WITH
NUMEROUS 'CORDED' ZONES.
(See p. 645.)



b. *PITHOS* FROM MAGAZINE IX WITH
'ROPED BAND' IMITATING 'ADDER-
MARK'. (See p. 642.)



PITHOS FROM MAGAZINE VI OF A LATE TYPE
SHOWING INCISED 'ADDER-MARK' DECORATION
ON FLAT BANDS. (See p. 643.)



a. *PITHOI* IN MAGAZINE V

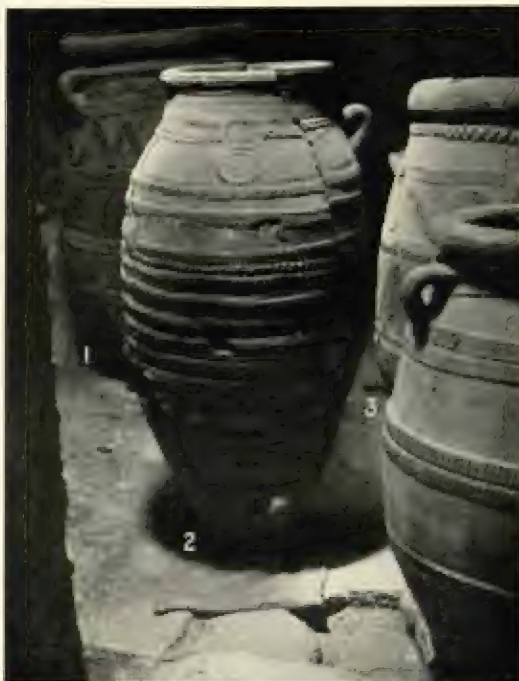


b. *PITHOS* OF MAGAZINE VI



c. *PITHOI* OF MAGAZINE IX: No. 2 COMPARED
WITH BASKET-TYPE FROM KORDOFAN.

(See p. 633 seqq.)



d. *PITHOI* IN MAGAZINE IX: 2,
'BOTTLE-SHAPED'.





BASKET (FOR SUSPENSION) USED FOR BUTTER
BY BAGARRA TRIBE, KORDOFAN, COMPARE
WITH *PITHOS* SUPPL. PL. LIX, c 2, ETC.

(See pp. 645-7.)



LONG MAGAZINES XI, XII, WITH SINGLE LINES OF *PITHOI*, CLOSELY PACKED AS EXCAVATED. (See p. 647.)





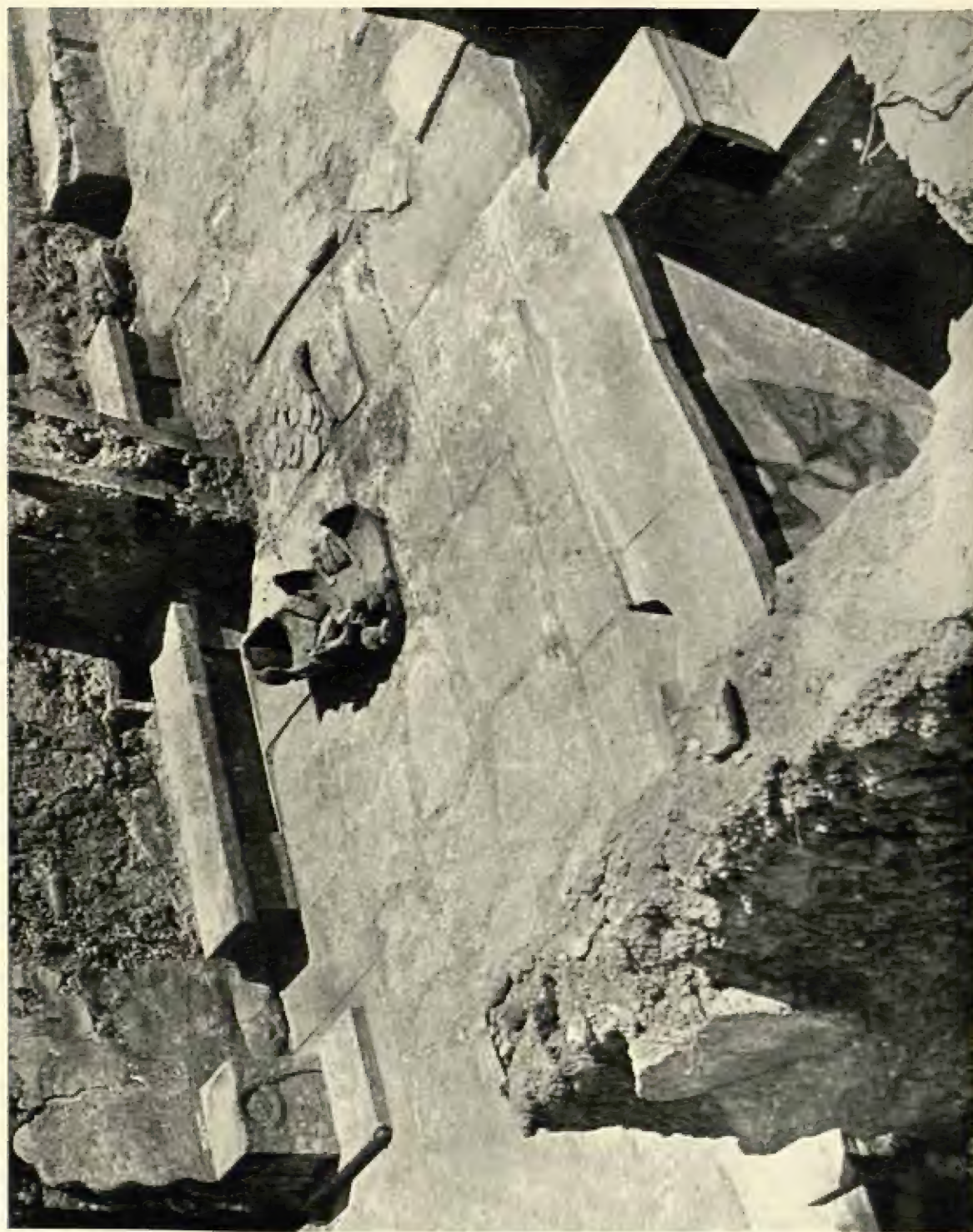
a



b

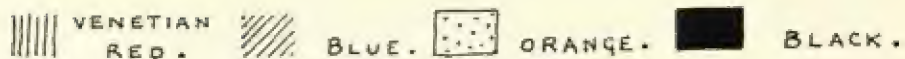
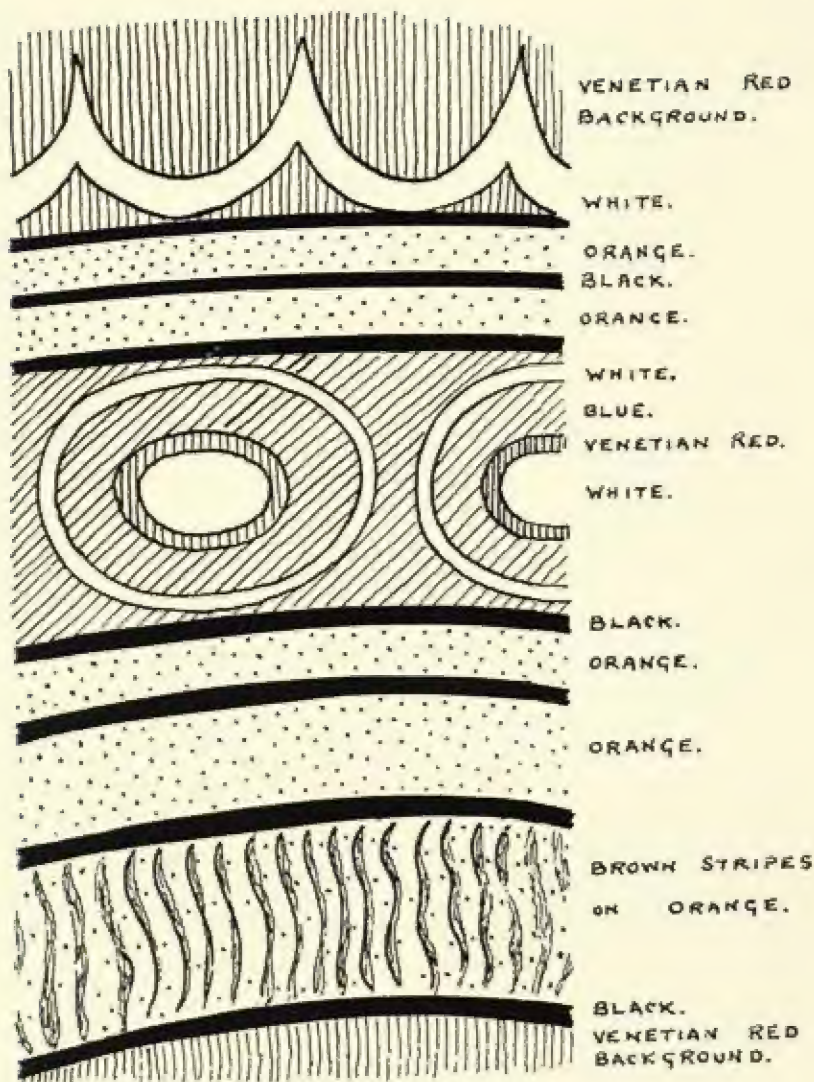
TABLET INSCRIBED ON BOTH FACES WITH LISTS OF MEN, THE 'MAN'
SIGN BEING REPEATED AFTER EACH SIGN-GROUP.
(See pp. 701-6 and Fig. 687 a, b.)





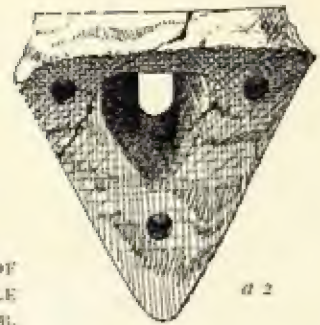
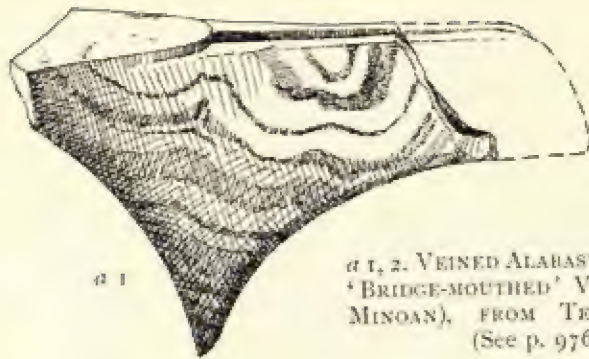
VIEW LOOKING DOWN ON 'ROOM OF THE THRONE', WITH LUSTRAL BASIN, AND OF PART
OF ANTE-ROOM BEYOND WHEN FIRST CLEARED. (See p. 907 seqq.)





SECTION OF ARGONAUT FRESCO WITH COLOUR KEY.
(See p. 889.)





a 1, 2. VEINED ALABASTER SPOUT OF
'BRIDGE-MOUTHED' VASE (MIDDLE
MINOAN), FROM TEMPLE TOMB.
(See p. 976.)



b. INCOMPLETE GRAFFITO SKETCH, APPARENTLY OF PART OF A MINOAN GALLEY,
ON ALABASTER SLAB OF SEPULCHRAL
CHAMBER : TEMPLE TOMB, KNOSSOS.
(See p. 956.)



c 2

c 1, c 2. FRESCO FRAGMENTS SHOWING
REEDS WITH STRIATED SPRAYS OF
KNOSSIAN L. M. II STYLE, MYCENAE.
(See p. 1013, and cf. *B.S.A.*, xxiv,
PL. IX, 11, 13.)

c 1





Fresco from Mansion at Amnisos, the Eastern Haven
of Knossos, from Dr. Sp. Marinatos' Excavations (as
restored by Mons. E. Gilliéron, fils).

(See p. 1002.)

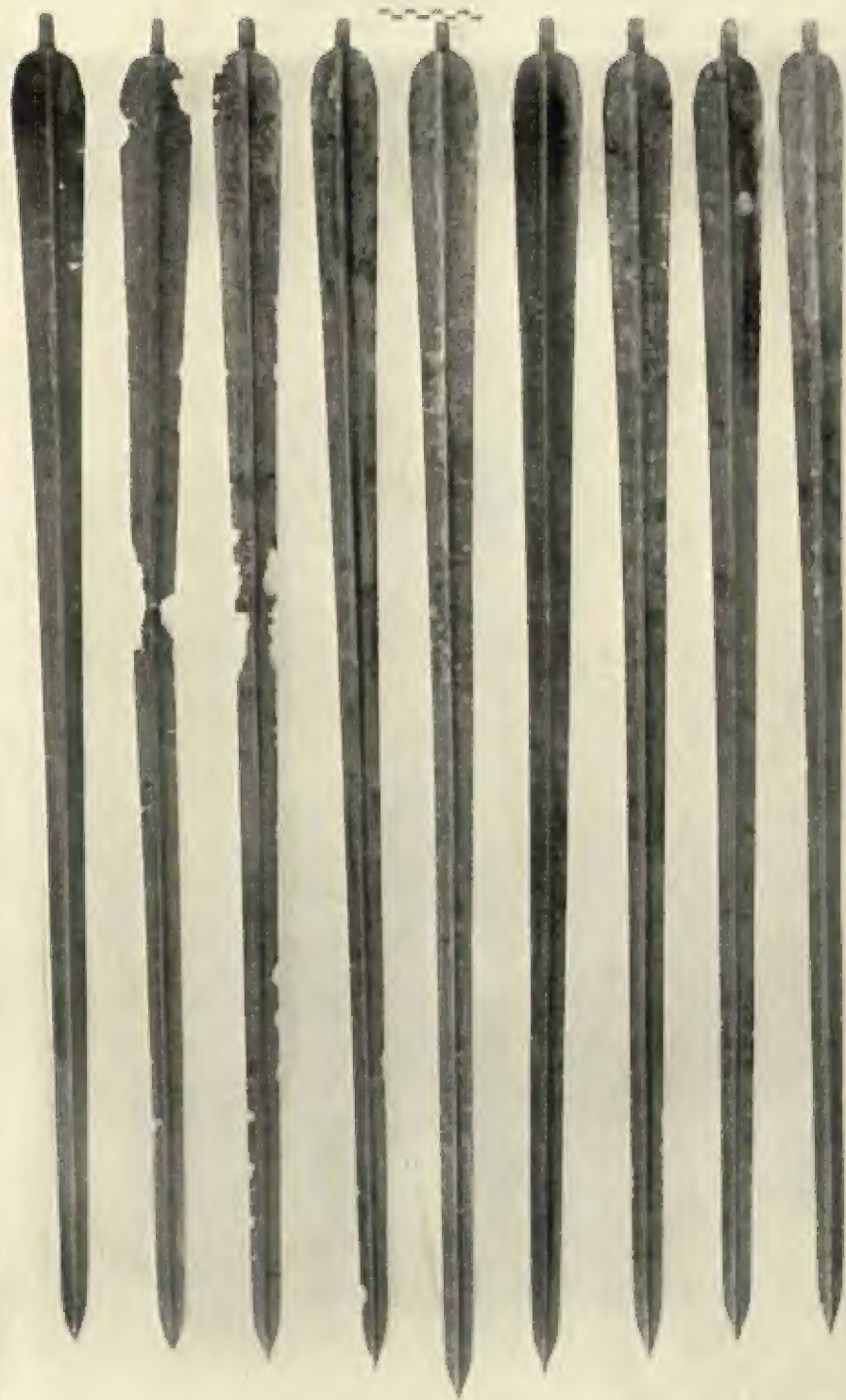




Fresco from Mansion at Amnisos, the Eastern Haven
of Knossos, from Dr. Sp. Marinatos' Excavations (as
restored by Mons. E. Gilliéron, fils).

(See p. 1002.)



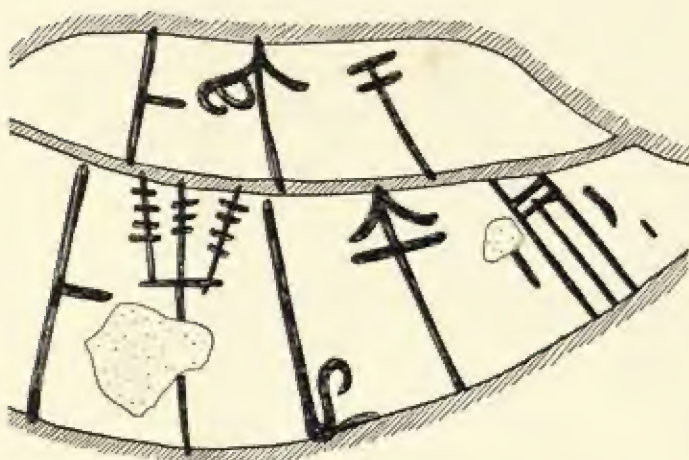


BRONZE LONG-SWORDS, ABOUT A METRE IN LENGTH, OF M. M. III^d DATE. FROM RECENTLY DISCOVERED VOTIVE PIT IN
CAVE OF ARKALOKHORI, S.E. OF KNOSSOS. (FROM PHOTOGRAPH BY DR. SP. MARINATOS).
(See p. 846.)





a. INSCRIBED STIRRUP VASE, ELEUSIS:
FROM THE EXCAVATIONS OF PROF. K.
KOURONIOTES.

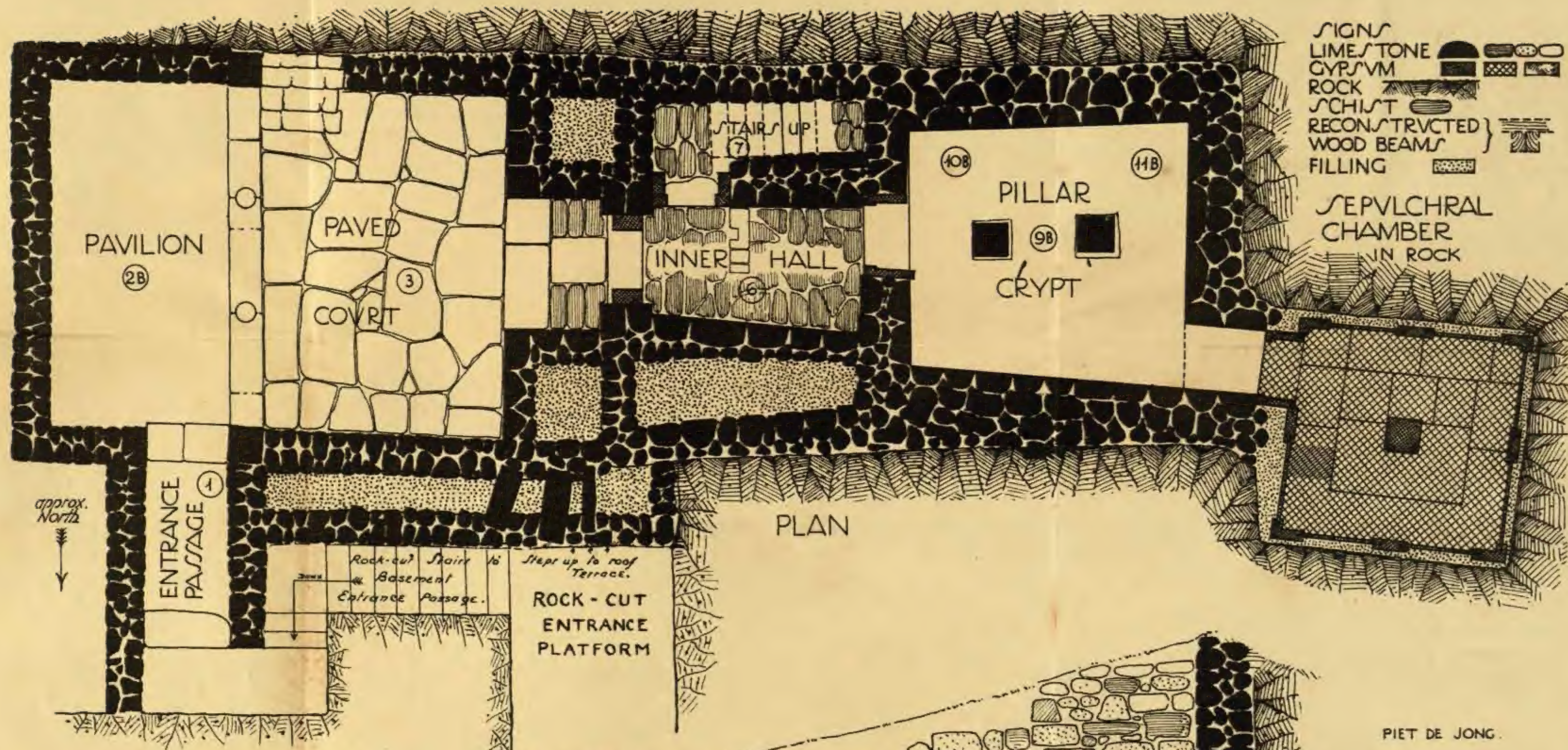


b. INSCRIPTION OF CLASS B ON STIRRUP VASE, ELEUSIS.
(FROM COPY KINDLY FORWARDED BY PROF. KOURONIOTES.)
IN THE LATE PALATIAL SCRIPT OF KNOSSOS THE INSCRIPTION
READS:

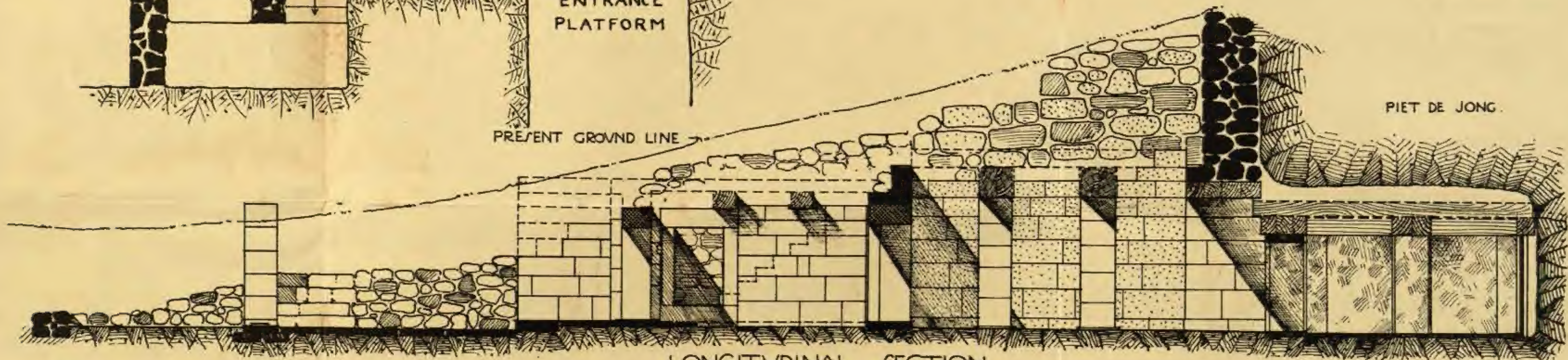
↑↑↑ ↑Ψ↑↑↑

(See p. 744)



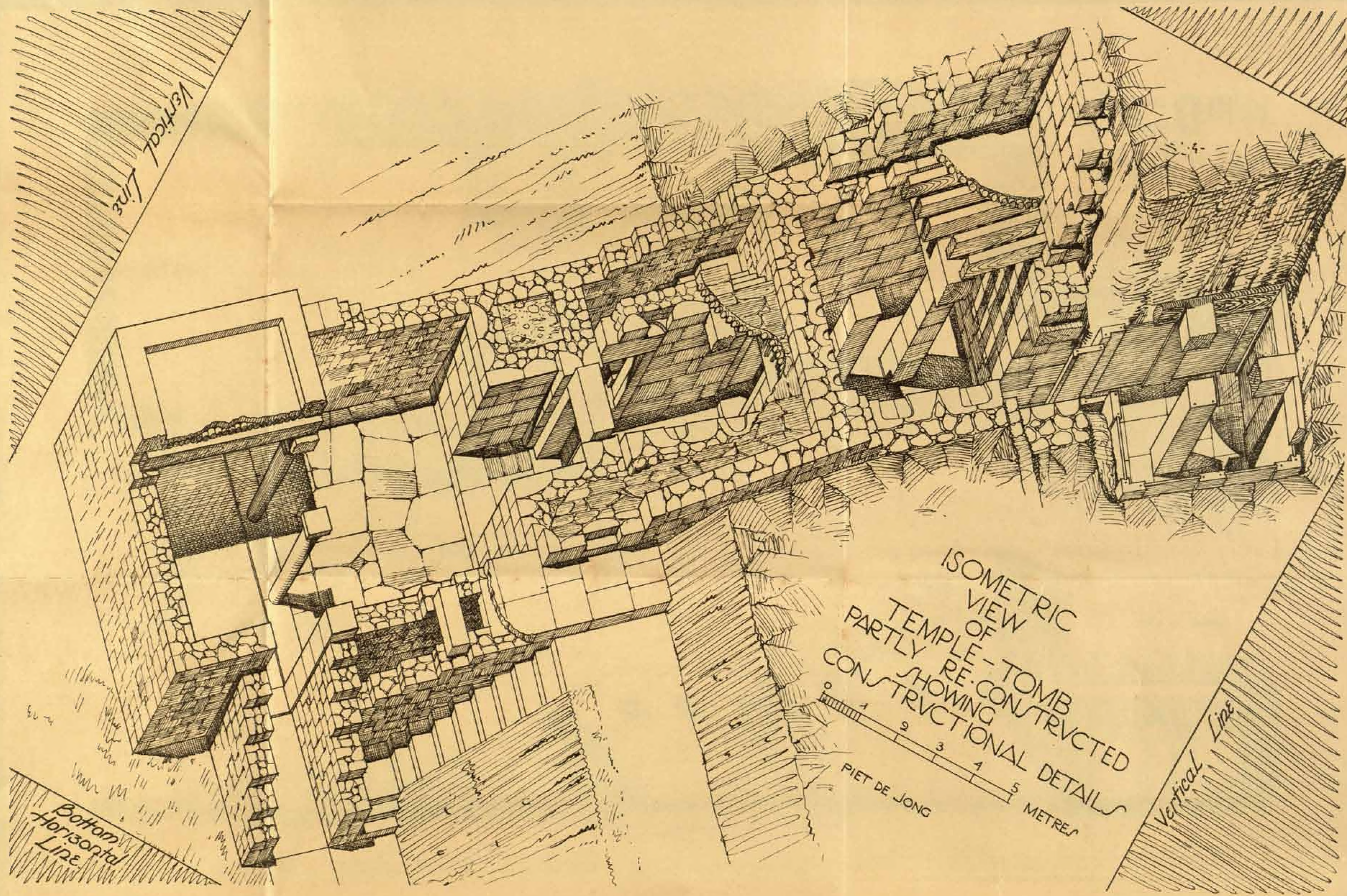


PLAN



LONGITVDINAL SECTION





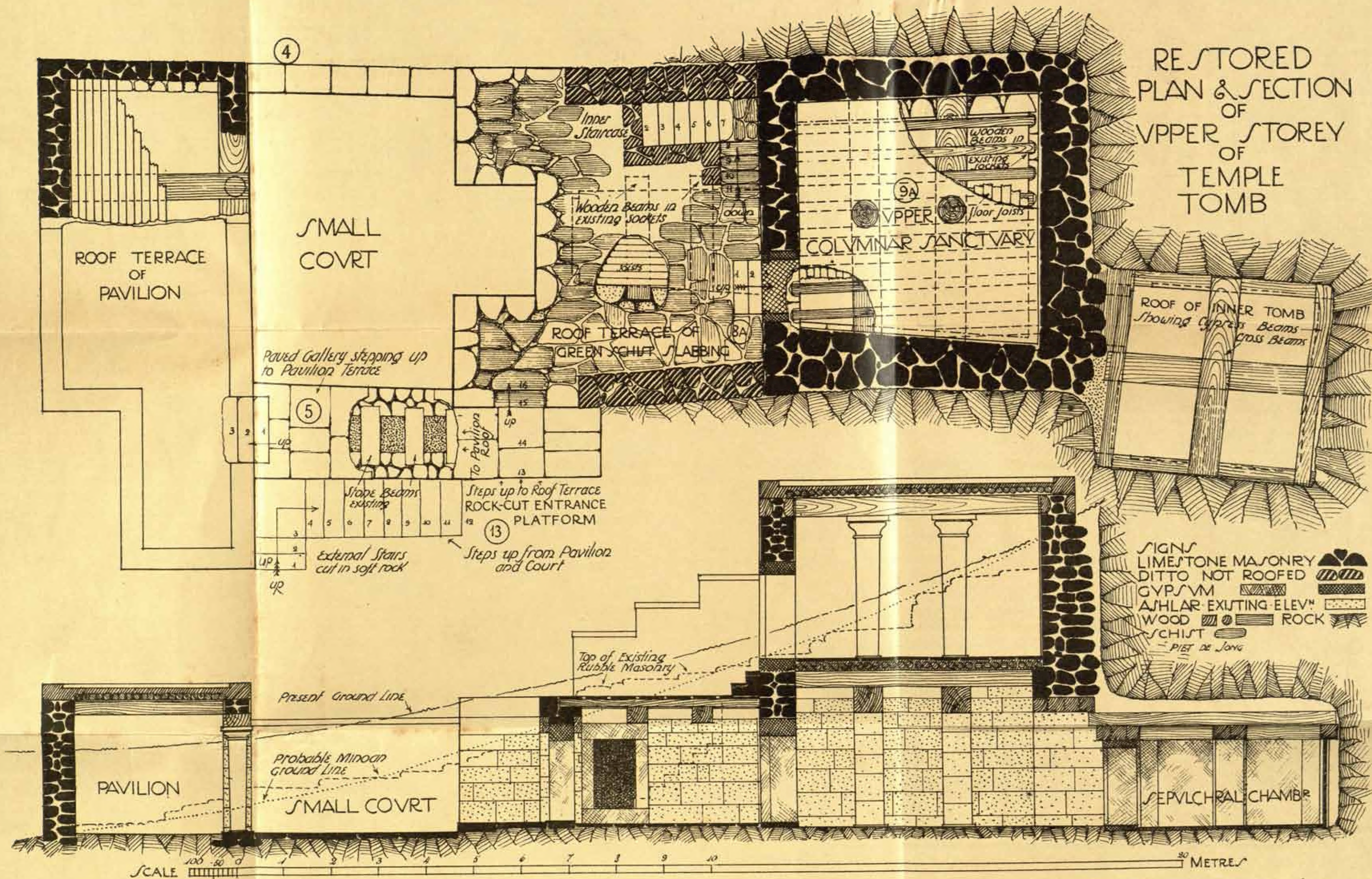
Vertical Line

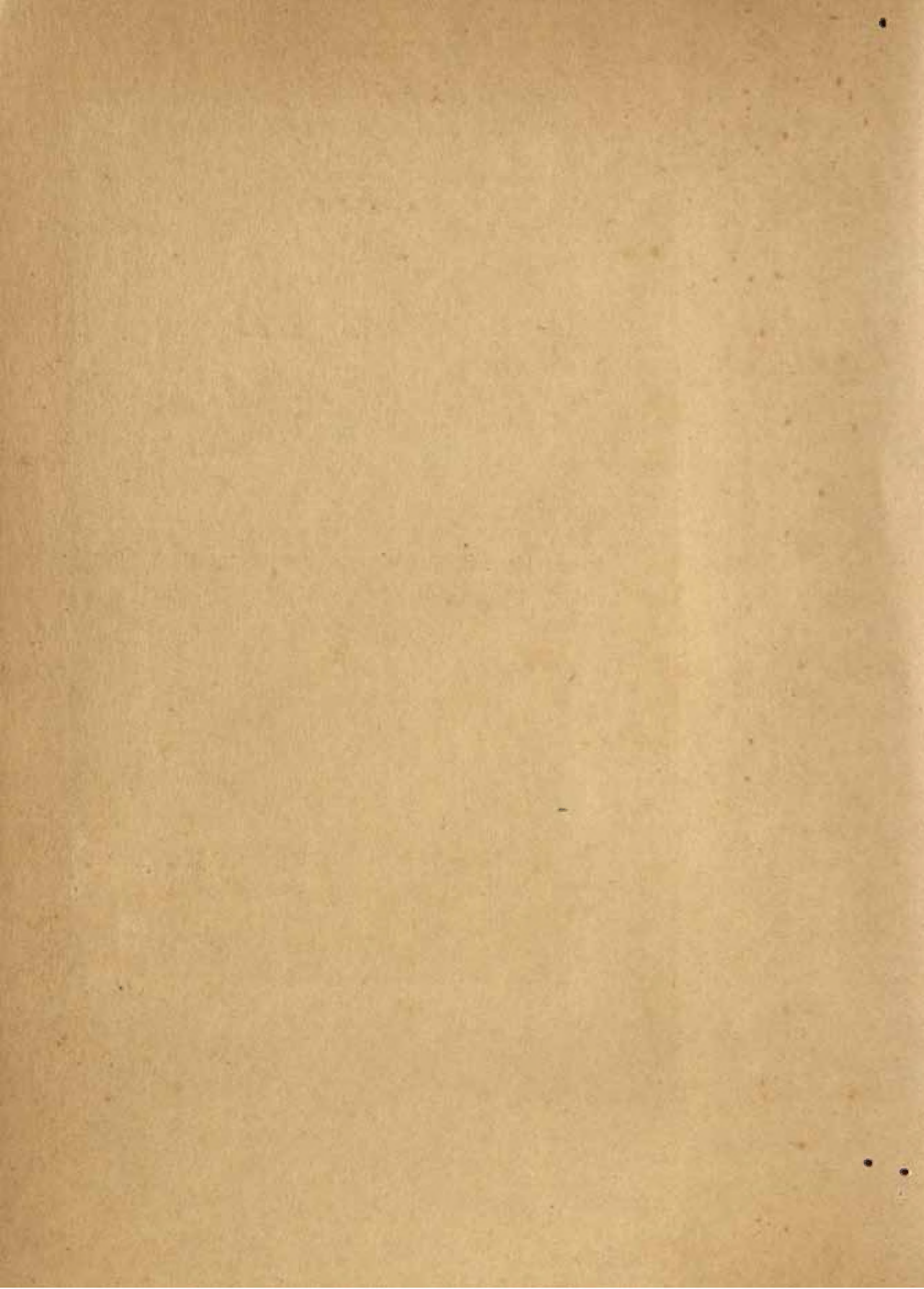
Bottom Horizontal Line

Vertical Line

ISOMETRIC
VIEW
OF
TEMPLE - TOMB
PARTLY RE-CONSTRUCTED
SHOWING
CONSTRUCTIONAL DETAILS

0 1 2 3 4 5
PIET DE JONG METRES





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